

# THE MEDICAL NEWS.

A WEEKLY JOURNAL OF MEDICAL SCIENCE.

VOL. LX.

SATURDAY, JANUARY 16, 1892.

No. 3.

## ORIGINAL ARTICLES.

### INJURY TO THE SPINE: INVENTION AND APPLICATION OF PAPER JACKET.

BY J. MARSHALL HAWKES, M.D.,  
OF NEW YORK CITY.

IN the early part of 1887, Ada G., aged twenty-three years, having received a fall, began to suffer from pain in the vicinity of the third lumbar vertebra. Later, the pain at times became so violent that she could neither stand nor sit, but was obliged to maintain the recumbent position. It did not, however, become continuous until the following autumn, when she became subject to such severe and prolonged attacks as incapacitated her for work.

The attendant physician ordered blisters to be placed transversely across the body of the affected vertebra. For nine weeks this style of treatment was continued, but little relief was obtained and the pain returned in all its severity on the resumption of work.

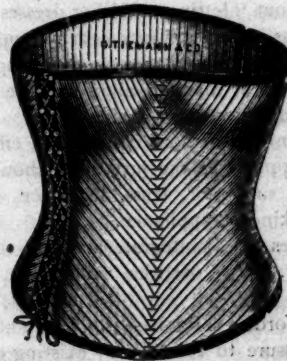
In May of that year, becoming convinced that she was not improving, she applied to a specialist in electro-therapeutics. For two months electricity was applied, but again the patient experienced but little relief, and the pain promptly returned on the resumption of work.

In December, ten months after the commencement of her trouble, I was called to see her. Since the ordinary, routine treatment had already been tried, nothing seemed to remain but to remove the superincumbent weight and thus, if possible, relieve the pressure upon the injured vertebra. Accordingly, the patient was suspended by the head and shoulders, when the pain immediately disappeared, but the patient as promptly fainted. It was found impossible to suspend her longer than a few minutes at a time; for several days, but as soon as she could remain suspended a sufficient length of time a plaster jacket was made. On its application the pain immediately ceased, but the patient constantly complained of the weight and the discomfort of the plaster jacket. Besides, after a few days, the disintegrating plaster began to sift down through her clothing, the odor of accumulating perspiration became very disagreeable, and the jacket itself grew loose and did not properly support the weight of the upper part of the body.

Finding it necessary, for the reasons stated, to supply something lighter, felt, leather, silicate of soda bandages, wood, mickelled electroplate, etc., were successively tried, but each had its serious and irremediable objections. Without entering into tiresome and useless details, they were all

either hot, heavy, cumbersome, conspicuous, expensive, or difficult to prepare, etc. While in this quandary as to what to make, a paper shell, such as is used by professional oarsmen, furnished the needed suggestion. Surely, if paper could be used to make a pail, pan, car-wheel, or a boat, it certainly appeared to be an appropriate substitute for the materials in use for spinal supports. Accordingly, a mould of the patient's body was made by winding wet plaster bandages around the body, from the anterior superior spinous processes of the ilia to near the lower borders of the axillæ, while the patient was suspended, with the pelvis fixed. A plaster cast, made from the mould, was so modelled as to preserve the natural anatomical contour of the patient. Upon this cast, paper of various styles, weights, and qualities, cut into strips half an inch in width, were laid in successive layers, running in various directions, by means of glue, cement, shellac, and many other compounds, until, after a long series of very discouraging experiments, a jacket of pure jute fiber, free from clay and wood-pulp, was finally produced which the accompanying cut very excellently represents.

FIG. 1.



The ideal paper jacket.

This appliance was no sooner fitted to the patient than all her objections to the use of a spinal support vanished. It was neat, cleanly, thin, light, strong, inconspicuous, readily removable, and comfortable to the wearer. Only one thing more was necessary. It must be capable of expansion during respiration, and yet immediately contract and not lose its hold on the thorax during expiration. This requirement was met by dividing the jacket into two parts on the axillary lines, and lacing them together with an elastic lacing. This was done and the jacket seemed to meet every reasonable demand.

The patient was ordered to remove the jacket at night on retiring, and *not* to put it on in the morning till the spinal column had been thoroughly extended by suspension after the method already described. She was also given a thorough training in light gymnastics to strengthen *all* the other muscles of the body as well as those of the back. The result was very gratifying. She experienced immediate relief from the pain, and within two weeks returned to her work in a millinery establishment, where she has ever since remained. As her shape has changed somewhat from time to time, other jackets have been made for her with equally good results. Since then many other jackets have been made for other patients with lesions of a similar character, and always with the same success.

Compared with other orthopedic appliances intended to furnish a proper support for the spine when the lesion is in the lower dorsal or lumbar region, I believe that for the following reasons the method described is the best yet devised:

1. It is the thinnest, lightest, and strongest jacket, furnishing sufficient support, ever made. Though its average weight is only about twelve ounces, and its average thickness less than three thirty-seconds of an inch, yet it is able to sustain a weight of over two hundred pounds.
2. It is impervious to moisture; hence, does not absorb perspiration, and consequently does not become unbearable to the wearer.
3. A lady can wear it in place of the ordinary corset without "letting out" her dresses or making any changes in her ordinary wearing apparel.
4. The most muscular laborer engaged in the severest kind of manual labor finds it capable of sustaining any necessary strain.
5. It furnishes a more convenient, efficient, and durable support for the jury-mast, shoulder-brace, abdominal supporter, truss, leg-brace, etc., than any other kindred appliance.
6. It does not disintegrate and soil the clothing like plaster, or rust out like "alloy wire," or soften like felt.
7. It affords a solid base from which to furnish direct pressure to remedy any existing or developing deformity, yet accommodates itself to the action of the muscles of respiration.
8. It can be easily modelled to fit any exaggeration of anatomical contour, and can be ventilated by means of eyelets to any extent.
9. It is practically indestructible. The patient can never wear it out.
10. Its cost is no more than that of any other first-class appliance.

Soon after perfecting the paper jacket, I extended the application of paper to the making of splints. The result was as gratifying as in the case of the jacket.

The preparation and use are best illustrated by the following case:

On September 9, 1891, Carl W., nine years of age, while playing in the street, was run over by a heavy wagon and sustained a double compound comminuted fracture of the right leg. I saw the patient within a few minutes after the accident. No important vessels or nerves were injured, and after the usual antiseptic dressing had been applied, the leg was put up in a Levis splint (nickelled electroplate). In four days, the swelling having subsided, a plaster bandage was applied, immobilizing both knee and ankle, but leaving a fenestra over the seat of the injury.

Several difficulties immediately presented themselves: the joints could not be immobilized for an indefinite time without fear of ankylosis; the plaster bandage could not be removed to make passive motion of the joints without great trouble and danger of displacement of the bones; the limb could not be bathed and the accumulating scales of epidermis removed, for a similar reason; the wound could not be re-dressed without the disintegrating plaster falling into it, unless much precaution was used.

FIG. 2.



The ideal paper splint.

Indeed, the annoyance became so great that I decided to make a splint of paper on the same general plan as had been used in the construction of the paper jacket. Accordingly, a shallow box, with adjustable sides and ends, was made ready, and filled half-full of prepared plaster. Into this plaster the limb—nude, shaved, oiled, and thoroughly extended—was lowered, until the plaster covered the lower or posterior half of the limb. As soon as the plaster set, a brush filled with melted paraffin was passed over it. Over this enough plaster was poured to cover the limb. As soon as the plaster had set, the sides and ends of the box were let down, the

upper half of the mould was removed, and the leg was carefully lifted out of the lower half. The whole time occupied was less than fifteen minutes. The upper half of the mould was returned to its place, the box restored, and a perfect mould of the limb was thus made ready. A cast made from the mould was used as a model on which to lay the paper for the splint. The accompanying cut represents the splint after it had been cut from the cast and bound. Hooks were inserted in both sides of the splint.

As soon as this splint was adjusted to the limb, the disadvantages of plaster were more readily apparent. After using it for ten weeks in one of the worst fractures that I have ever seen, the following points of superiority were demonstrated:

1. Since it is made on a plaster cast of the limb itself, it must fit perfectly.
2. Since the cast was made while the limb was fully extended, it follows that this position of extension will be maintained as long as the splint is carefully adjusted.
3. Since it weighs less than a pound, is only three thirty-seconds of an inch thick, and yet is able to sustain a weight of over two hundred pounds, it follows that it is the lightest, thinnest, and yet the strongest splint ever made.
4. Perfect immobilization of a joint can be secured, yet the joint can be inspected at a moment's notice, since either the anterior or the posterior half can be removed without disturbing the other, and because either half of the splint is able to keep the limb in its proper position, for a limited time, without the aid of the other.
5. Both the outer and the inner surfaces are waterproof; hence there is no absorption of perspiration, no odor, no fear of getting the splint wet while bathing or dressing the limb.
6. It offers no obstacle to making passive motion of the joints at any time, since by removal of the posterior half the knee can be flexed or the foot extended at will without fear of displacement.
7. In compound fractures it simply becomes necessary to remove that half of the splint which covers the wound, and irrigate and dress it, with the confident assurance that the other half will hold the limb securely.
8. During the period of convalescence the patient can wear his usual clothing over the splint.
9. The uniform pressure checks muscular spasm and lessens the tendency to swelling and edema.
10. There is no great difficulty to be overcome in the preparation of these splints, and any first-class instrument-maker should be able to furnish them with facility.

## NEUROMA.

(With Report of a Case.)

By EDMUND J. A. ROGERS, M.D.,

PROFESSOR OF CLINICAL SURGERY, UNIVERSITY OF DENVER; SURGEON TO THE ARAPAHOE COUNTY HOSPITAL, ST. LUKE'S HOSPITAL, ETC.

WHEN, in connection with the rarity of nerve-tumors, we consider the complex structure of nerve-tissue, we can easily understand the confusion that exists in the nomenclature and classification of these tumors, and their generally undetermined pathological structure. Thus, in an ordinary nerve-trunk we have the nerve-fibers proper surrounded by their medullary coats of myelin, this limited by the neurilemma, set in the endoneurium, and this again surrounded by the laminated perineurium, and all included in the coarser connective tissue of the epineurium. Each differs in its structure, and each is liable to the pathological changes to which all tissues are subject, each is liable to its own peculiar changes, and any two or all of them are liable to be attacked at the same time. Add to all this the difficulty of demonstrating axis-cylinders and other nerve-structures satisfactorily by ordinary histological methods, and what wonder that we seldom find two nerve-tumors described as being similar in structure?

The confusion begins in the very title. The clinical surgeon has few means during the life of a nerve-tumor to diagnosticate its structure, whether of fibrous tissue, or of pure nerve-tissue only, or mixed. He has therefore, of necessity, come to classify all tumors connected with and inseparable from nerves as neuromata.

On the other hand, pathologists, and especially the German pathologists, insist that it is highly improper to call a tumor a neuroma that has no true nerve-tissue in it.

We must, however, give some name to these tumors before they get into the pathologist's hands, and in the absence of a better we shall, therefore, adhere to the old definition that all tumors connected with and inseparable from the nervous system are neuromata. But when we come to a true scientific classification we find these growths divided into two great classes, not always distinct from each other, true neuromata and false or spurious neuromata. In the former the characteristic and predominating tissue is nerve-tissue, while in the latter the nerve-elements are absent, or occupy only an accidental or subordinate place. All neuromata are rare, but true neuromata are found much more seldom than the spurious.

True neuromata may be divided into three classes:

<sup>1</sup> Read before the Colorado State Medical Society, June, 1891.

1. The ganglionic, medullary, or cellular neuromata.

2. The fasciculated or fibrillar neuromata, and—

3. The plexiform neuromata.

The ganglionic are found almost entirely in the nerve-centers, and are made up chiefly of ganglion-cells and naked axis-cylinders. They are rare, and are not of surgical importance.

The second variety, however, is of more interest. Its characteristic tissue is constituted of ordinary nerve-fibers set in connective tissue, the arrangement of the two varying greatly in the different specimens. As long as the connective tissue does not too greatly predominate and is related to the nerve-elements as its matrix, the growth is still called a true neuroma. There are said to be some tumors in this class, although they are very exceptional, in which the constituent nerve-fibers are non-medullated. Such tumors are consequently termed amyelinic, to distinguish them from the myelinic neuromata, or those having medullated fibers.

The usual seat of neuromata is in the course of the spinal nerves, principally in the extremities, but they are sometimes found on the cranial, and very rarely on the sympathetic nerves. The growths usually appear as simple spindle-shaped or oval enlargements of the nerve, are usually symmetrical in shape, sometimes flattened, and of any size up to or even larger than a hen's egg. They are said to be generally grayish in color, and firm and elastic to the touch. They seem to be produced by a local hyperplasia leading to an hypertrophy of the nerve-structures, and can often be traced to an irritation or injury to the nerve. This injury is sometimes subcutaneous. That the lesion may first cause simple inflammatory changes, and these lead to hypertrophic changes, there can be no doubt. It is said that neuromata do not always invade the entire nerve-trunk, but that they may grow upon only a section of it, crowding the remainder to one side. To this class belong the terminal, traumatic, or amputation neuromata found in stumps. These tumors are said to be usually connected to the cicatrix by small radicles. They are generally small in size, and only exceptionally cause any inconvenience.

We find placed in this class those tumors that develop in the peculiar constitutional condition that is characterized by the formation of a great number of nerve-growths, although they may be more properly fibro-neuromata. These multiple neuromata sometimes develop in immense numbers—in one case estimated at over two thousand. They sometimes appear only on one nerve, sometimes on a single set of nerves, and sometimes throughout the entire nervous system. This condition occurs almost exclusively in males, and may perhaps be due to some hereditary neurotic taint. It is not infre-

quently seen in cretins, and a few cases have been encountered in idiots.

The third variety mentioned—plexiform neuromata—includes those rare congenital growths made up of varicose-like convolutions of hypertrophied nerve-cords. They are so rare as yet to have no clear distinctive description, and are often confused with other similar tumors. They may lie deeply, or be immediately beneath the skin. They most frequently occur on the branches of the fifth nerve, but have been found in various other locations.

Nerves are liable to all the pathological changes that occur in other tissues, and these localized changes constitute the usual cause of the simpler false neuromata. Of these by far the most common is the fibroma. This may originate in any of the fibrous tissues of the nerve, and may grow to a considerable size without affecting the nerve-tissue proper. Thus, if in the epineurium or laminated perineurium, it may grow only on one side of the nerve as a pedunculated or semi-detached growth, or it may completely encircle the nerve, forming a cylindrical sheath, which may be easily dissected away. If it arises in the interior connective tissue it may crowd the nerve to one side, which will then pass in a sort of groove in the tumor; or, if still more central, it may divide the nerve into several fasciculi that may become widely separated, but may still remain distinct and easily separable from the fibroma. These growths are generally harmless, and seldom interfere with the functions of the nerve. Clinically, they closely simulate the fibrillar neuromata, but are apt to be more globular and not so spindle-shaped as the true neuromata; they may be more laterally attached to the nerve, and hence more movable.

The fibromata, again, are clinically closely simulated by the myxomata, which are said to be the next most frequent in occurrence of the non-malignant spurious neuromata. Nerve-cysts are also occasionally found, as are also such mixed tumors as cysto-myxomata, fibro-myxomata, lipomatous myxomata, etc. Spurious neuromata may also be due to malignant diseases of the nerve. Of these, sarcomatous growths are the most common, while primary carcinomatous tumors are very rare indeed. Gummata are rare in nerves, except in the cranial nerves. In leprosy a peculiar true neuroma is often found present, and may play some part in the pathology of the disease.

Closely connected with neuromata, but not properly belonging to them, are the painful subcutaneous tubercles—the neuromata dolorosa of Virchow—of which much has been written. These are little nodular bodies, the seat, or rather the center, of excruciating intermittent and remittent pain and tenderness. A drawing sensation, not definitely

localized, is also sometimes experienced about them. They vary in structure, being sometimes described as simple fibromata, sometimes like true neuromata, but they are generally much more complex. They are not always found to be connected with the nervous system, but, of course, are probably so connected. It seems reasonable to suspect that they are altered or hypertrophied superficial nerve-endings, although this has not yet been demonstrated. They occur most frequently on the arms, back, and neck, but may occur at any part of the body. They are much more frequently found in women than in men. Where not too numerous, treatment by simple extirpation is satisfactory.

Neuromata in general have no characteristic symptoms. When situated on a large nerve-trunk there are generally more or less defined neuralgic pains, sometimes terribly severe in intensity, intermittent and remittent in occurrence, and seemingly affected by external and constitutional circumstances, as in true neuralgia, or there may be only a deep, dull aching. Later on, sensory symptoms, such as formication, tingling, and numbness, and such motor affections as twitchings, tremors, and weakness may develop. Actual sensory and motor paralysis, if seen at all, usually are late in appearance. Indeed, one is surprised to find how few and how slight the symptoms are, and the symptoms do not seem directly to depend upon the size of the tumor.

In heterologous growths, when the nerve is invaded and destroyed, we, of course, expect to find more rapid growth and greater loss of function in the parts than are found in simple growths. When a tumor develops in a bony canal, we expect paralysis below from pressure. Occasionally, reflex symptoms are encountered, such as pain and muscular contractions. Even epileptiform convulsions have been stopped by the removal of a superficial neuroma. When the symptoms are marked, weakness is generally noticed in the muscles supplied by closely associated nerves.

Neuromata cannot be diagnosticated from symptoms alone. When the growths are superficially situated they are sometimes found to be tender, and manipulation may cause pain in the distal course of the nerve. But even these features are remittent. In idiopathic neuromata the tumor may vary in size from time to time, and may even disappear. We are assisted in diagnosis by finding that the tumor is in the course of a nerve, and that it is freely movable to one side of the nerve, but fixed in the other direction. Pain and tenderness in the tumor, and in the nerve beyond, can generally be abolished by pressure on the nerve above the tumor. Non-traumatic, non-malignant neuromata are very slow in development, but they may occur at any age,

and may grow to any size. Virchow states that they are found more frequently in the tuberculous and scrofulous diatheses. They are benign, but true neuromata have a tendency to recur after removal.

When treatment is demanded, extirpation is alone of benefit, but should not be lightly undertaken. In case of multiple neuromata it is unwise to attempt removal, and this should be undertaken only when some one local tumor is causing great and persistent distress. In these multiple growths the prognosis is generally good, as they appear seldom to directly affect the duration of life.

The case that I present herewith is one of much interest:

Miss Jennie S., unmarried, twenty-three years of age; is a native of Sweden, but came to Kansas twelve years ago. In childhood she had attacks of quinsy, and when first in Kansas had malaria severely. She gives no history of any other disease, and I can discover no tuberculous or scrofulous taint, and no specific history. She was well and hearty, when in May, 1889, she struck her arm on the sharp corner of an ice-chest. She scraped the skin, and suffered a severe bruise over the inner side of the lower portion of the arm. The part was sore for about a week, when all symptoms disappeared for about two months. The girl then began to have shooting pains from the seat of the injury down into the little finger and hand. Swelling or other symptoms were not observed. In the following fall, as the pains were growing worse, she placed herself under medical treatment. During the winter, the pains and "queer" sensations in the arm and hand progressively increased, and at night became so severe as to prevent sleep. In the spring of 1890, while on her way to Denver, she noticed the arm swelling about the site of the bruise; the pains became intense, and soon the hand also swelled. The swelling in the arm was said to be an abscess, and was poulticed, but was never opened. The swelling gradually subsided, but the little finger remained blue, weak, painless, without feeling, and seemed in the way. As the swelling left the arm, a small lump remained. Soon the pain began to return, and became very severe at night, the tumor gradually increasing in size. As it did so, the hand got weaker and more awkward; it was numb and tingling, and there was no feeling on the inner side, so that the girl was constantly burning and hurting it unconsciously. She says that she noticed wasting of the inner side of the hand, the ball of the thumb, and between the bones of the hand. This grew worse gradually, the hand becoming very awkward and in her way. On February 5, 1891, she called upon Dr. Eskridge, who examined her and made the following notes of her condition, which he has kindly allowed me to use here:

"Sense of touch was completely lost in the little finger of the left hand, and in the corresponding portion of the hand to the wrist-joint. Tactile sense was present on the ring finger on both the

inner and outer surfaces. Tactile sense normal over the arm and forearm. Pain-sense affected only in the little finger, where it was simply lessened, not abolished. Temperature-sense in the same region lessened. The little finger could neither be flexed nor extended. It remained in a semi-flexed position, on account of rather firm contractions of the flexor muscles. It was impossible for her to abduct or adduct the little finger. The grasp of the left hand was very weak, and the whole hand was moved slowly and awkwardly. Only the muscles of the little finger were tested by electricity, and these were found partially degenerated."

Dr. Eskridge subsequently advised her to go to the County Hospital, which she did, and was there placed under my care.

I first passed an exploratory aspirating-needle into the tumor, as there seemed to be obscure fluctuation in it, but the only result was to cause intense pain—the old pain, she said—down into the little finger.

On February 24th we operated by cutting down longitudinally over the tumor, which was found to be a symmetrical spindle-shaped enlargement of the ulnar nerve, its center being about three inches above the elbow. The tumor itself was about two and a quarter inches long and two inches in circumference, but the entire nerve, as far as it was exposed in both directions, was found much hypertrophied and hardened. No line of demarcation between the nerve and tumor could be found, the latter being to all appearances simply an enlargement of the former. After dissecting the tumor perfectly free on all sides it was incised longitudinally, and gradually split quite in two. Within a definite capsule a grayish-white substance was found, growing softer toward the center, and closely resembling the white substance of the brain. In the center was a cavity filled with a thick, gray, grumous substance, probably desiccated pus. The matter appeared homogeneous throughout. The nerve was then divided just above the tumor, and the tumor drawn up so as to stretch the lower portion of the nerve as much as possible. The nerve was then divided just below the tumor, and the extremities still not approximating, the upper portion was grasped by the fingers and drawn down forcibly as far as possible. Although two and a half inches of the nerve had been removed, the extremities were then brought to within three-eighths of an inch of each other by means of two strong catgut sutures passing completely through each nerve-extremity at right angles to each other. The wound was then closed entirely, and the arm from the shoulder to the knuckles placed on a straight splint. The patient was kept in bed. On the second day it was found that some sensation had returned in a small area on the little finger, and that there was some power of motion in the finger. The wound healed by first intention, pain disappeared entirely at once, and though the hand was swollen for some time, improvement soon set in and has ever since continued. The straight splint was kept on for about five weeks, but the hand was not allowed to be put to any use for seven weeks. It was then treated by massage. By rapid and con-

stant improvement, strength and sensation almost completely returned.

At the present time the hand appears normal, except that the muscles of the third and fourth intermetacarpal spaces seem still wasted. The grip is strong, and the hand seems as useful as it ever was.

I here give the report made by Dr. Lobingier, the pathologist of the hospital, to whom the tumor was submitted for examination:

"The tumor belongs to the class of fibrillary myelitic neuroma, and consists of collections of nerve-fibers bound together by connective tissue, running in some instances directly and in other places tortuously through the tumor. Consequently some of the nerve-fasciculi fall directly in cross-section, whereas others appear wavy and parallel, or branched, being cut longitudinally. Certain sections show a preponderance of fibrous tissue, richly studded with leucocytes. One area, which appears in almost every section, is remarkable, in that the nerve-bundles are in various stages of waxy degeneration, and this, in cross-section, appears dense and homogeneous. Owing to the fact that the tumor was hardened before it came into the demonstrator's hands, it was impossible to stain the axis-cylinders, as could have been done in the fresh specimen with gold chloride. The medullary sheath and white substance of Schwann may be made out in the cross-sections of the fasciculi. The neoplasm is remarkable for its excessive vascularity, and the waxy degeneration of certain nerve-studded areas, an unusual phenomenon."

What the ultimate outcome of this interesting and perhaps unique case will be remains to be seen. As we have said, these tumors tend to recur. In this case a much-thickened and greatly-stretched nerve was sutured, leaving a considerable interval. These conditions, I fear, give ground for apprehension.

I have little doubt that the blow two years ago set up a traumatic neuritis, which resulted in the extensive thickening, and later in a local intraneural suppuration. This became quiescent after so permanently damaging the nerve as to make its functions hopeless without surgical interference.

#### MECHANICAL INFLUENCES IN PELVIC DISORDERS.<sup>1</sup>

BY KATE REYNOLDS LOBINGIER, M.D.,  
OF DENVER, COLORADO.

It is written that "man is fearfully and wonderfully made." Must we confess that woman is fearfully ill-made? Have all mechanical and physical laws been disregarded in her construction, so that pelvic disease is a necessary sequence? There are vigorous women that have the strength and endurance of men. If the constructive idea is at fault, why should the uterus of one woman be well sustained, and that of another sink like lead? We

<sup>1</sup> Read before the Colorado State Medical Society, June, 1891.

have here a problem in physics. If we would solve it, we must do so by the general principles of mechanics. If we accept this truth, we shall be willing to search patiently for natural principles of support, but, if we regard pelvic disease as inevitable, we shall be satisfied with palliative measures.

Pelvic disorders may be grossly classified as displacements and inflammations. In discussing mechanical aids we shall have most to say in reference to malpositions, but it is understood that whatever restores normal position helps the pelvic circulation, thus removing the cause of inflammation and acting as a direct curative agent.

In considering aids for the correction of pelvic deformities, it is common to regard the pessary of paramount importance. No discussion of the subject would be comprehensive that failed to consider this popular instrument.

It is easy to multiply objections against the pessary, but one most rarely insisted upon is the use of this instrument to the neglect of fundamental physiological laws.

Among other objections to the pessary are the following. In many cases the instrument cannot be tolerated, in others it is useless, and there are cases in which it does actual harm:

1. When chronic peritonitis exists, or a prolapsed ovary is present, the pressure of a foreign body is too painful to be endured.
2. If a pessary is not carefully selected and properly adjusted, so as to receive support from the bony framework, it will lie idle and useless in the vagina.
3. An effective pessary will in time cause distention and lessened tissue-tone. The vaginal wall will lose elasticity, and become flaccid, without retaining-power.
4. In time the patient becomes enslaved to the use of the pessary, and this fact must be considered when it is remembered that, sooner or later, there will come an end to the utility of the instrument.
5. Sometimes a foreign body, like the pessary, acts as a constant source of irritation. The catarrhal discharge that results, and the retention of this septic material, may cause softening of the tissues and actual imbedding of the instrument.
6. Skillfulness and care will overcome many objections to the pessary, but the fact must always remain that it is a bad mechanical principle to support a body like the uterus by a prop from below. If the uterus were enclosed in a bony cavity and shut off from all connection with other organs, a small instrument like the pessary might be sufficient; but remember that we have an immense weight of superimposed viscera bearing down from above, and the pessary must perform a task akin to that of Atlas with the earth upon his shoulders.

3\*

To support the earth with a prop is an ancient and crude idea. It took years for the truth to develop that the sustaining force is far distant in the sun. The analogy is good. The main sustaining force of the uterus is not located in the pelvis, but acts from a distance.

Is it expedient to rule the pessary out of practice because objections may be urged against it, and because the instrument is capable of misuse? In answer to those that reject pessaries, Thomas says: "Pray, then, what *do* you use?" It is well to remember that an elaborate nihilism is often as disastrous as the too ardent advocacy of a questionable measure. It must be admitted that a certain benefit accrues from the temporary employment of the pessary as an adjunct to other and more rational methods of treatment. When great congestion exists, the elevation of the uterus by means of a well-adjusted pessary allows the blood-current to resume its normal course, the size and weight of the organ is reduced, and the pessary acts substantially as a curative agent. The instrument may also prove a valuable palliative measure by relieving tension on the nerves and the attending suffering.

The influence on the patient's mind must also be considered. It is often true that the introduction of a pessary is followed by instantaneous relief. The patient is greatly encouraged, and may be induced to lead a more active open-air life. The benefit to her general health thus derived may be a valuable element in establishing a permanent cure. The facility with which temporary relief may be given and the ease with which the pessary may be applied make this instrument popular both with physician and patient. The effort necessary to gain proper coöperation on the part of the patient in securing adequate support to the uterus by other and more permanent means makes resort to this instrument a natural compromise. Many of the arguments adduced against the use of internal supports apply with equal force to external support by means of the abdominal bandage. Both are palliative and temporary, and this is especially true of the external support. It would be idle to argue that an abdominal bandage is in any sense curative, but the lifting up of the viscera relieves the dragging sensation that is often the source of much discomfort. It is not uncommon for women to assume the responsibility of wearing such a supporter without the advice of a physician, and with no other assurance of its propriety than the temporary comfort afforded in walking and standing. A patient may become so wedded to this means of relief that she is afraid to step on the ground without such aid, and it is true that the longer she wears the bandage the weaker do her muscles become. The application of a splint to the brachial region will cause atrophy and

incompetency of the biceps, and the continued use of the external support is in its effect on the abdominal muscles just as pernicious. The evil results of the bandage are most strikingly seen in puerperal women. The uterus is large, the ligaments yielding, and the bandage tight. The patient believes her form is being preserved in the best possible manner, but what is really the result? The uterus moves in the direction of least resistance, and the fundus finds a resting-place in the hollow of the sacrum; retroflexion, subinvolution, and metritis are likely to be the unfortunate sequelæ. This serves to illustrate what the tendency may be in a non-puerperal patient, if there is great congestion of the uterus and laxity of the tissues.

A mechanical agency more effective than the best supporter is *gravity*. This force is resistless, and most of the physical ills of womankind have been ascribed to its pernicious influence. A factor thus potent in the production of pathological conditions must be equally powerful in affording a remedy when the conditions are reversed. Water rises in an artesian well, forced up by the gravity of water in the adjacent hills. A loaded car is drawn up the steepest mountain-side by the weight of a descending car. Why may not the force that caused prolapse be made the effective agent to restore correct position?

As an illustration of the excellent results obtained from gravity, we may instance the retroflexed, pregnant uterus. Skillful manipulations from below may prove entirely futile in rectifying this condition. But if the patient, resting on her elbows, is by a nurse lifted to an angle of forty-five degrees, the uterus will fall forward. If this exercise is repeated every day till the fundus has risen above the promontory of the sacrum, a complete cure is effected, and the distressing effects of incarceration are avoided. A remedial agent is sometimes effective in proportion to its simplicity.

In cases in which the pelvic organs are congested and misplaced, it is remarkable what excellent results may be obtained by the persistent use of the knee-elbow and similar positions. The blood-current at once becomes more active, the nerves are relieved of tension, and pressure on neighboring structures is removed. Reclining with the hips elevated, lying in the Sims position, or on the face, are palliative measures of great value.

The tendency of gravity is to remove the causes of disease, but, at best, it can be only an intermittent force. Nature's method of sustaining should act continuously.

The *suction-force of respiration* is a power that is constantly operative, and it is entirely competent to regulate the movements of a refractory uterus. With the aid of a Sims speculum, under favorable con-

ditions, a to-and-fro movement of the uterus may be observed. If the waist is constricted, or the breathing feeble, this motion is slight or absent. But if the respirations are vigorous, it will be noticed that at every expiration the cervix is drawn up out of sight. This "breathing" of the uterus is necessary to pelvic health.

The human trunk is substantially constructed on the model of a suction-pump. We may consider the chest, abdominal, and pelvic cavities as one continuous tube. In this cylinder the diaphragm moves up and down after the manner of a piston. In a pump some thirty feet of water is lifted. A force that has this power ought certainly to lift the viscera upward for several inches. Suction-force is the power that Nature has provided for the support of the pelvic contents.

The organization of a woman is not structurally defective, but the adjustment of parts is peculiarly delicate, and any interference with normal action is followed by disease.

Over-exertion has been assigned as a cause of uterine disorders, but as a matter of fact we find that women of sedentary lives suffer more frequently than those that lead lives of normal muscular activity. A seamstress is more apt to be afflicted with pelvic disease than a housemaid. Any exercise that keeps the blood in active motion must have a derivative influence on the pelvic viscera; but exercise of the upper extremities is most directly beneficial in the prevention and cure of uterine disease. The close connection between the arms and pelvis is evident. In the simple exercise of standing with the hands clasped behind the head, the chest-walls are lifted outward and upward by the action of the great pectoral muscles attached to the humerus, as a result of which the chest capacity is augmented, the diaphragm rises, the abdominal contents have room to ascend, and those of the pelvis follow.

Sylvester's method of artificial respiration illustrates the extreme value of arm-movements in cases of feeble breathing. This exercise is itself an admirable one for its effect on the pelvic contents.

But it is clear that any exercise intended to develop respiratory power must utterly fail if there exists an antagonistic force capable of nullifying every effort. The corset has been cordially condemned for its restrictive influence on respiration, but, in addition, many women wear tight bands equal to five yards of continuous bandage. Attached to these bands there are often from six to seven pounds of heavy clothing, exerting direct pressure downward.

Suppose we have a suction-pump in which the cylinder is somewhat yielding. Around the middle, were the piston works, let us put on stiff splints and bind them fast with five yards of continuous band-

age, then suspend from the bandage seven bags of shot that weigh each a pound. Now try to move the piston. The excursions are of small amplitude, but the wonder is that the piston moves at all. Nature meant the uterus to be sustained, but she made no allowance for Parisian fashions. The lifting upward of the viscera implies that there must be space enough below the diaphragm for the abdominal contents to pass freely upward. Any mechanism whereby this space is limited must in a double sense prove injurious. Not only is free movement of the respiratory area prevented, but the abdominal viscera are held down by hydrostatic pressure on the pelvic organs. Abdominal respiration in women must be restored before we can successfully combat the many forms of uterine disease.

The argument presented for discussion is briefly as follows:

1. Mechanical remedies are important, and local applications are not sufficient.

2. The four mechanical aids considered are the *pessary*, *abdominal bandage*, *gravity*, and the *suction-force of respiration*. Of these, the first two are least effective, because they operate on incorrect mechanical principles. Their aid is temporary and palliative, and their continued employment subject to abuse.

3. *Gravity* is a powerful palliative agency, and its tendency is curative, but it is a force that cannot be employed continuously, and it is directly dependent on the patient's will.

4. The only mechanical power that can be in constant operation, and is strictly curative in uterine disorders, is the *suction-force* of unrestrained respiration. This power is fundamentally correct in principle, it operates independently of the patient's will, and is the only force adequate to successfully antagonize the prolapsing tendency of gravity.

5. Any mechanical treatment must fail of complete success if it ignores the upward respiratory lift of the viscera, dependent on unrestricted action of the diaphragm.

#### A CASE OF BILATERAL LUMBAR ABSCESS ASSOCIATED WITH POTT'S DISEASE.<sup>1</sup>

BY J. K. YOUNG, M.D.,  
OF PHILADELPHIA.

THE following case illustrates the result of conservative treatment of a very severe bilateral lumbar abscess accompanying Pott's disease in a young child.

J. P. B., a male child, four years of age, referred to me January 28, 1890, by Dr. William E. Hughes,

had been in perfect health until the previous summer, when he fell down a step, striking against a stove. The mother subsequently noticed a small projection in the lumbar region, and the child complained of pain in the knee. Examination revealed caries of the spine, with a projection of the spinous processes of the eleventh and twelfth dorsal and the first lumbar vertebrae. A Taylor spinal assistant was applied and worn, and internal and local remedies were employed. Subsequently a very large abscess developed on the left side; this was twice aspirated, and still later a smaller abscess developed on the right side, and was allowed to open spontaneously. Full antiseptic dressings were employed throughout, and at present there is a very small superficial sinus unhealed. The vertebrae are ankylosed, and the child now enjoys good health, and runs and plays as other children.

The subject of lumbar and iliac abscesses has already been so ably discussed that in presenting the present case of recovery from severe bilateral abscess it will only be necessary to refer to the seat of the disease and the importance of the fasciæ in determining the course, exit, and prognosis of purulent collections in the lumbar region. It is a well-recognized fact that abscesses in every region of the spine follow a pretty definite course and termination, the direction and exit of the pus being influenced by the seat of the lesion and by the fasciæ and aponeuroses. Thus, in the cervical region, the deep cervical fascia plays a most important part in determining whether the abscess shall take an anterior course and open into the posterior wall of the pharynx; whether it shall burrow beneath the deep fascia into the thorax as a mediastinal abscess, to terminate by breaking into the trachea, esophagus, or through an intercostal space; or whether it will pass laterally between the longus colli and scaleni muscles, and will thus open posteriorly to the sterno-mastoid upon the side of the neck.

Treves, Jacobson, Hilton, and others have called especial attention to the great importance that, from a surgical point of view, attaches to the complex arrangement of the cervical fascia and Koenig, Henke, Saltman, and others have pointed out the importance of the fasciæ generally in determining the direction and pointing of abscesses from whatever cause. In the dorsal region, the strong fasciæ binding the ribs together determine whether the pus shall find its exit posteriorly upon the skin of the back or sides, a short distance from the spine, or whether it shall pass beneath the ligamentum arcuatum internum, and enter the psoas sheath to terminate in Scarpa's triangle beneath Poupart's ligament. In the lumbar region it does not appear to me that sufficient attention has been given to the importance of the fasciæ in determining the course of lumbar abscesses from caries of the vertebrae and

<sup>1</sup> Read before the American Orthopedic Association at Washington, September, 1891.

the effect of this change of course upon the prognosis of these cases.

The usual course for abscesses in the lumbar region is in one of four ways:

First, to be directed to the iliac region along the aorta and external iliac arteries, to terminate as a gluteal abscess; second, to enter the psoas sheath and become a psoas abscess; third, to burrow through the fasciæ of the quadratus lumborum and the internal oblique muscle, to appear on the surface between the external oblique and latissimus dorsi at the outer border of the erector spinæ muscles; or, fourth, to gravitate beneath the internal iliac muscles over the posterior brim of the pelvis, perforating the great sacro-sciatic foramen, to appear as a gluteal abscess. (See table.)

The variations of the course and termination of a lumbar abscess depend, first, upon the seat of the lesion, and second, upon the attachment of the fasciæ. In caries of the spine it is a well-recognized fact that the tuberculous process is usually limited to the bodies of the vertebrae, the articular and spinous processes never being primarily affected, and but rarely secondarily involved, their compact structure apparently protecting them. In exceptional instances the lesion is superficial and limited, the intervertebral cartilages escaping, but as a rule extension occurs by contiguity of structure until a considerable number, even all, of the vertebrae may become involved.

In examining a sectional diagram of the lumbar region it will be observed that the sheath of the psoas muscle and the lumbar fascia are the most important structures in this connection. The sheath of the psoas is a thin fibrous membrane derived from the iliac fascia—attached above to the ligamentum arcuatum, laterally by a series of arched processes to the intervertebral substances and prominent margins of the bodies of the vertebrae, and continuous below with the iliac fascia. The lumbar fascia divides into three layers, inclosing the quadratus lumborum, multifidus spinæ, and erector spinæ muscles, and giving attachment to the internal oblique. Its anterior and middle layers are attached to the transverse processes, and its posterior layer to the spinous processes. Above, its anterior layer is attached to the lower border of the last rib, forming the ligamentum externum. The posterior surface of the psoas muscle is separated from the quadratus lumborum by the anterior layer of the lumbar fascia—a very thin fascia—but the greater part of the muscle is firmly supported behind by the erector spinæ muscles. In front, the quadratus lumborum is very thin, and offers but little resistance to the exit of the pus. If the abscess find exit upon the surface of the vertebrae anteriorly to the attachment of the psoas fascia, it will

terminate by burrowing along the great vessels, or become an iliac abscess; if it open posteriorly to the psoas sheath it will burrow backward and laterally along the middle layer of the lumbar fascia, separating the quadratus lumborum from the internal oblique, through the internal oblique, and between the external oblique and latissimus dorsi, to appear at the outer border of the erector spinæ muscles.

This was the course of the abscesses in the case reported. The sheath of the psoas and the lumbar fascia, as thin as they are, are nevertheless very important factors in determining the direction, and with the direction, the prognosis of lumbar abscesses. So important do these fasciæ appear to the writer, that he would suggest a division of lumbar abscesses into two classes, external and internal, their relation to the sheath of the psoas fascia and the anterior layers of the lumbar fascia determining their position.

Variety.	Course.	Exit.
Cervical	a. Anterior.	Into posterior wall of pharynx.
	b. Burrow beneath deep fascia into thorax as mediastinal abscesses	Into trachea, esophagus, or through an intercostal space.
	c. Laterally between the longus colli and scaleni muscles.	Posterior to the sternocleido-mastoid.
Dorsal	a. Burrow posteriorly.	On the back or side, a short distance from the spine.
	b. Within psoas sheath.	Beneath Poupart's ligament in Scarpa's triangle.
Lumbar	a. Enter psoas sheath	As psoas abscess.
	b. Burrow between the fasciæ of the quadratus lumborum and abdominal muscles, through the internal oblique.	Posteriorly beneath the external oblique and latissimus dorsi at the outer border of the erector spinæ muscles.
	c. Gravitate beneath the internal iliac muscles over the posterior brim of the pelvis, perforating the great sacro-sciatic foramen.	Gluteal abscess.
	d. May be directed to the iliac region along the aorta and external iliac arteries.	Gluteal abscess.

#### LYMPHANGIOMA CIRCUMSCRIPTUM.<sup>1</sup>

BY M. B. HARTZELL, M.D.,  
OF PHILADELPHIA.

UNDER the name Lymphangiectodes, Tilbury Fox first described a curious, chronic, non-inflammatory disease of the skin characterized by the presence of peculiar vesicular and wart-like lesions,

<sup>1</sup> Read before the American Dermatological Association, September 25, 1891.

occurring in groups and patches. Subsequently, Mr. Jonathan Hutchinson presented two cases of a similar kind before the London Pathological Society, naming the disease lupus lymphaticus. More recently a few other cases have been reported, chiefly by English observers—but one, so far as the writer is aware, being found in American medical literature. Because of the rarity and unusual features of the disease, the following case, which has been under observation during a considerable period of time, has seemed of sufficient interest to report:

R. M., a boy, fifteen years of age, has since early infancy had an affection of the skin situated upon the left shoulder, and consisting of a half-palm-sized patch of flat, irregularly shaped vesicles, varying in size from that of a pin-head to that of a split pea, arranged in small groups each containing from six to eight discrete lesions. A considerable number of these vesicles, when examined closely, are seen to contain within their interior minute tufts of capillaries, which give to them a reddish hue. These lesions remain unchanged for many months at a time, but gradually disappear through absorption of their contents, new ones appearing from time to time to take their place. The contents of the lesions are a clear, pale-yellow serum. Occasionally, however, owing to the rubbing of the clothing, the minute vessels within some of the vesicles are ruptured, and the contents are then mixed with blood. The disease is unattended by subjective symptoms of any kind, there being neither spontaneous pain nor tenderness on pressure. At no time in the history of the eruption have there been any evidences of inflammation. During the past year, the entire patch has slowly moved anteriorly; the lesions have in great part disappeared from the scapular region, and now occupy the summit of the shoulder. The former site of the eruption shows some slight atrophy of the skin, with faint pigmentation, and here and there a few small, isolated papules. The skin between the vesicles shows no abnormality whatever. The disease was noticed for the first time in the second or third month after birth, the mother stating most positively that it was not congenital. The patient has no other affection of the skin, and has always been in excellent health.

In view of the rarity of the disease, it may be of interest in connection with this case to briefly review the leading features of the small number of cases thus far reported.

CASE I.<sup>1</sup>—The patient was a clerk, twenty-one years of age, born with two large nevi (port-wine stains) on the left thigh. At six months of age the veins of the left calf began to enlarge and became prominent. At the age of two years numerous warty growths appeared on the left buttock, the back of the left knee, and on the left half of the peri-anal region, coincidentally with an attack of

fever. At the ages of seven, eleven, fifteen, and nineteen years, similar attacks of fever occurred, with enlargement of the lesions and an increase in their vesicular appearance. At the time of the observation, irregular, raised patches were situated on the buttocks and in the left popliteal space, looking at a distance like warty growths, but on closer inspection resembling frog-spawn. The individual lesions looked like small pink warts with vesicular centers. The growth was not affected by pressure, and puncture gave exit to a clear watery fluid.

CASE II.<sup>1</sup>—A boy, ten years of age. The group of spots began with a wart-like spot upon the middle of the chin, one year previously; it spread slowly for a time, and then remained stationary. The patch, the size of a penny, was composed of clusters of small papules, many of which were translucent and contained fluid. The apices of these small lesions were dotted over with minute tufts of vessels. The disease showed great resistance to treatment, which consisted in cauterizations with nitric acid and the actual cautery. Where the disease was not wholly destroyed, it speedily recurred.

CASE III.<sup>2</sup>—A boy, seven years of age. There was a large patch upon the left shoulder which had existed three or four years. The disease was unattended by pain or inconvenience of any kind. The eruption consisted of clusters of isolated and confluent, pale, pin-head-sized elevations, many of them translucent, others blood-stained. The skin between the groups was pale, but otherwise normal. The vesicles contained clear lymph. In many of the lesions minute ecchymoses had occurred, and, in some, tufts of vessels were visible.

CASE IV.<sup>3</sup>—A youth, seventeen years of age. The eruption had existed several years, and was extending. The diseased skin had been the seat of several attacks of erysipelatous swelling.

CASE V.<sup>4</sup>—A girl, seven years of age. The disease was situated over the left trapezius, and consisted of groups of vesicles resembling warts. These vesicles contained clear albuminous fluid, and upon their apices and between them were tufts of capillaries. In close proximity to the large patch were several smaller ones of a similar character.

CASE VI.<sup>5</sup>—A young man, twenty-one years of age, suffered from slight scoliosis and lordosis, with atrophy of the left arm and leg. Groups of vesicles resembling herpes were situated upon brown, slightly thickened skin—in some instances upon normal skin—and occurred, in connection with painful multiple neuromata and cavernous angiomas, upon the left upper extremity, in the region of the brachial plexus. The vesicles were filled with clear serum.

CASE VII.<sup>6</sup>—The patient was a girl, ten years old. At the age of three years, the eruption made its appearance upon the left side of the neck, as a single spot resembling a blister. Within a short

<sup>1</sup> Jonathan Hutchinson: *Trans. Path. Soc., London*, vol. xxxi.

<sup>2</sup> J. Hutchinson: *Trans. Path. Soc.*, vol. xxxi.

<sup>3</sup> Hutchinson: *Clinical Illustrations*.

<sup>4</sup> Malcolm Morris: *Internat. Atlas of Rare Skin Diseases*.

<sup>5</sup> Kobner: *Verhandlung d. med. Gesellschaft, Berlin*, 1883.

<sup>6</sup> Noyes: *British Journ. of Dermatology*, December, 1890.

<sup>1</sup> Tilbury and T. Colcott Fox: *Trans. Path. Soc., London*, vol. xxx, 1879.

time other lesions appeared, which gradually enlarged, until they became the size of a small pea. At the time of observation the disease consisted of a patch of vesicular-like nodules, closely aggregated. Over some of the vesicles small capillaries were to be seen.

CASE VIII.<sup>1</sup>—A boy, twelve years of age. The disease was first noticed upon the phalanx of the great toe, shortly after birth. At six years of age, other lesions developed upon the leg, and subsequently new ones appeared all the way up to the middle third of the thigh. They slowly underwent involution while new ones were evolved. The veins of the right leg and thigh, the seat of the lesions, were markedly varicose, as were also the circumflex, iliac, pudic, and epigastric veins. No glandular enlargement existed about Poupart's ligament, and there was no discoverable obstruction to the circulation within the pelvis. The cutaneous lesions were situated in the course of and over the varicose vessels. They occurred in groups for the most part, the individual lesions being discrete. These groups consisted of from fifteen to thirty separate, deep-seated, vesicular elevations the size of a pin-head, seated upon normal skin. The contents consisted of a clear, slightly yellow fluid. A few telangiectatic vessels were seen running around the patches.

In addition to the cases detailed, Crocker has reported two, and Walsham one; all three occurring in children, and presenting features similar to those already described.

It is worthy of remark, that in three of the cases the disease was associated with some abnormality of the vascular system. In all it first appeared in childhood, and in the majority in the early months of infancy. The number of cases, however, is yet much too small to permit any trustworthy conclusions to be drawn from these facts.

In the few instances in which microscopic examination of excised portions of the diseased tissue was made, it was found that the principal pathological changes had their seat chiefly in the papillary and sub-papillary layers of the corium. These alterations consisted in the formation of numerous flask-shaped or funnel-shaped cavities containing granular matter, and in some instances, red blood-corpuscles. Langster, who examined lesions from one of Hutehinson's cases, regarded the deeper cavities as dilated lymphatic channels, and the more superficial ones as the result of the distention and rupture of lymph-spaces in the papillary layer. More recently, Török, who examined portions of skin taken from the case reported by Noyes, has expressed the opinion that the process is not simply a dilatation of preëxisting lymph channels, but is a hyperplastic one, leading to the formation of new lymph-vessels.

The only treatment likely to be of service is

cauterization by means of caustics or the actual cautery. This should be done in the most thorough manner, care being taken to destroy every portion of diseased tissue. Failure to accomplish this is quite certain to be followed by a speedy recurrence.

## ORIGINAL LECTURE.

### SIX CASES OF COAL-GAS POISONING, ONE OF THEM WITH AUTOPSY.

BY PROF. J. M. DA COSTA, M.D., LL.D., ETC.

*Clinical Lecture delivered at the Pennsylvania Hospital, December 5, 1891.*

[Special stenographic report for THE MEDICAL NEWS.]

GENTLEMEN: I shall this morning call your attention to a remarkable group of cases of coal-gas poisoning. There were admitted into the hospital on the first of December six Italians, whose history is briefly as follows: They were all sailors on the Italian barkentine "Selina," lately arrived at this port. On November 30th they had gone to sleep in the fore-castle, next to the cook's galley, in which a fire was burning in a stove. It was subsequently learned that it was a stove that had just been purchased, and as the men were not familiar with the management of a coal-stove, they neglected to attach a pipe to it before lighting the fire. As the night was cold, the fore-castle was tightly closed. In the morning, as none of the men were out, the captain and mate went into the fore-castle and saw them apparently asleep; but they could not be aroused. The hospital ambulance was summoned, and Dr. Miller, the resident physician, accompanying it, upon arrival found four of the men absolutely unconscious, and two merely dazed, who staggered in walking. All six were promptly brought to the hospital.

From this point we will take up the history of these cases in two groups: first the two light cases, and afterward the four grave cases. The members of the first group were, as just stated, not unconscious—they walked, though with a staggering gait; their faces were flushed and wore a stupid expression. The temperature was 99.6° in one case, 100.2° in the other; therefore only slightly elevated. Their conjunctivæ were injected, but the pupils were normal. Respiration was accelerated: in one 24 and in the other 28 to the minute; and the pulse was likewise slightly increased in frequency. Both cases presented extreme irritability; they did not want to be disturbed, and insisted upon being let alone and allowed to sleep. The younger one was absolutely savage when he was aroused. They remained in this mental condition only a short time. The next day they were natural in temper, and the flush had disappeared or was present to only a slight extent; the temperature kept a little above the normal. The urine in both of these comparatively light cases was free from albumin and sugar, and was copiously passed. Indeed, it was healthy urine, except that it contained considerable urates.

As further symptoms in the case of the elder one of the two, G. F., aged thirty years, it should be noted that he complained of much pain in his limbs and in his back; also, though to a less degree, in his

<sup>1</sup> Elliot: N. Y. Med. Record, May 16, 1891.

arms. He had, indeed, diffused pains throughout his body, which were not present in the other patient, C. G., nineteen years of age. Both of them presented a hacking cough without expectoration, without change of voice, and without physical signs in the chest.

This was their early history; their subsequent course was as follows: On the 3d of the month (third day in the hospital) the temperature in both was down to normal. The pulse in the younger one showed a slowing, falling soon after admission to 60; this morning it is 68, with respiration 20, and temperature normal. In the second case there was no slowing of the pulse. This morning the pulse is 70, respirations 24, temperature 98.4°. In truth, these men are convalescent. They no longer present any flush; they feel well; they have lost their irritability, and the pains also have gone. A slight cough remains in the first case. The tongue, in Case II, is coated and the bowels are constipated, and, indeed, these have been features throughout the case.

We now come to the remaining group of four cases, which were of a more severe type; for we have broadly distinguished between those in which there is little disturbance and no loss of consciousness, and those in which the poisoning was more decided and with distinct loss of consciousness.

Here is Case III, the first of the series of bad cases. His name is V. V., forty years of age. On admission he presented the same general symptoms as the two preceding cases, except that he was very nearly unconscious, only opening his eyes in a dazed way when he was disturbed, and immediately relapsing into stupor. His face was flushed; the pupils were equal and moderately contracted; his lips were bluish; he had passed urine and feces involuntarily. When he was brought in, his temperature was 101.4°, pulse 110, respirations 24. He remained in the same condition throughout the day, except that he vomited once in the afternoon, about four o'clock, after which he brightened considerably, opening his eyes and seeming more rational. Later in the same afternoon he had two slight chills, and began to cough, bringing up muco-purulent expectoration. He perspired freely about his face and upper part of the body. The next morning, after a fairly good night, he seemed more comfortable, and he slept the greater part of the day. A few dry râles were found in his chest; his respirations were 30, pulse from 90 to 100.

During the day the bronchial symptoms became marked, and the temperature more elevated, ranging between 102° and 103° on the second and third days, declining on the fourth to 99.8°, and finding since its way down to normal; at no time has it been a subnormal temperature. He has perspired freely. The rapid breathing and the râles were never associated with signs of dulness; there was, however, slightly impaired resonance, with congestion of the lung, most marked at the right base. His pulse was weak, as was the first sound of the heart. The urine-record was very instructive. On admission, he was catheterized. The urine was acid, clear, of a specific gravity of 1022, and seemed normal, without albumin or sugar. The urine drawn the same evening was acid, clear, of a specific gravity of 1026, and contained a faint trace of albumin, but no casts were detected. On the second day after admission the urine was acid, very turbid, of a specific gravity of 1024, and showed

a little more than a trace of albumin. That morning a few hyaline casts were discovered, with epithelium and abundant urates. Since then the albumin and the casts have disappeared. The urine was examined for sugar on two separate occasions, and none was found. The man has had a great deal of pain in the muscles of the back, arms, and legs. It still hurts him to be turned over in bed and in any way to move his body. His tongue is heavily coated, and his bowels are constipated. His pulse is 86, the respirations are 24, and the temperature is 99°. He coughs and has copious muco-purulent expectoration. He has dry râles at the lower part of the left lung, and rather feeble breathing, with a slightly impaired percussion-note at the lower part of the right lung; in other words, he has still a congested right lung and bronchitis upon the left side. As to the heart-sounds, I find the first sound still feeble; there are no murmurs. The splenic dulness extends just to the margin of the ribs. The bowels are only moved by injections.

Of Cases IV and V, I will give you a brief record. G. T., who is Case IV, is a boy of thirteen years. His face on admission was flushed rather more than in the other cases; he was absolutely unconscious. His pupils were equal, neither contracted nor dilated. He also was exceedingly irritable and restless. His arms were rigid and folded across his chest; there were muscular contractions in the arms. His lips were blue and he frothed at the mouth. His pulse was 132 and weak; the respirations were regular and 24 to the minute; his temperature was 99°. Toward evening on the day of admission he had somewhat roused, but was still restless, showed great irritability when disturbed, and had a frowning countenance. In the evening his temperature was 97.4°, and he was not fully conscious. During the night he refused all milk and medicines. He urinated involuntarily. He had several severe chills and slept poorly, crying out and moaning, and putting his hands frequently to his head, as if in pain; he perspired freely. His condition the next day was more wakeful, yet he was very irritable when disturbed, and had decided muscular pains and soreness. His urine-record was as follows: Urine drawn on admission was turbid, 1022, acid, and fairly loaded with urates, but no albumin was found. In the evening, the specimen was turbid, 1022, acid, and did not contain albumin or sugar. The morning urine was turbid, 1026, acid, contained urates in abundance; there was a trace of albumin and some hyaline casts. The next day (on the 3d), his urine was normal and the casts had disappeared. After this he gradually improved; his temperature lowered, but there was again a slight rise yesterday; it went up to 102°, and has remained elevated since. He has some cough, with a few râles, and the same coated tongue and tendency to constipation of the bowels as the other cases. His blood contains 4,040,000 red corpuscles to the cubic millimeter; the white corpuscles are not increased; the hemoglobin is 87 per cent.

Case V is F. C., aged forty-five years. His temperature on admission was 97°, pulse 90, respirations 26. The temperature had gone up in the afternoon to 102°, with pulse 84 and respirations 22, and it remained elevated until the 4th inst., when it descended rather abruptly to the normal. It has since reached 103°. His

face was at first heavily flushed and with a frown on it. He has chest-symptoms: cough, muco-purulent expectoration, with dry and moist râles, but no impairment of resonance upon percussion. He, too, has a coated tongue and constipated bowels and muscular pains and tenderness—these, indeed, in an aggravated form. His pulse was feeble, slightly accelerated—about 80; the first sound of the heart was also weak.

He has an interesting urine-record. As he was unconscious upon admission, his urine was drawn by catheter. It was found to be clear, specific gravity 1024, acid, and free from albumin. The afternoon urine was turbid, 1026, and contained a slight amount of albumin, with hyaline casts, blood-corpuscles, and crystals of urates and of oxalates. The next morning it was again turbid, still albuminous, and contained blood-corpuscles, casts, and oxalates. The following morning the urine was clear again, of a specific gravity of 1022, with traces of albumin, and a few hyaline casts. On the 4th (yesterday) the urine was normal, containing neither albumin nor sugar.

Let us analyze these cases of coal-gas poisoning and view their common features. Five of the six recovered; of the remaining case I will presently show you the specimens. Before proceeding, let me state the treatment that was followed. It consisted in a plentiful supply of fresh air; in oxygen-inhalations to the bad cases; in digitalis, given hypodermatically, to sustain the action of the weak heart; and in stimulating expectorants, especially the syrup of senega, to which late in the case, in a few instances, ammonia was added. The diet consisted of milk. None were freely stimulated except the one that died, but they all had a slight amount of stimulant given, from time to time, when they seemed very weak. Due attention was paid to the condition of the bowels by the administration of salines.

Five of these cases, as I have already told you, are nearly well; it only remains to decide what is to be done for them now. Those that are comparatively free from bronchial irritation, but present coated tongues, we will put upon acid, and administer thrice daily fifteen drops of dilute muriatic acid in infusion of cinchona, two drams. To keep the bowels soluble, we will give a saline—a teaspoonful or more of Rochelle salts each morning in a glass of water. In the cases in which bronchial symptoms persist, we will prescribe muriate of ammonia, 10 grains, in each dose of syrup of senega, which shall be continued. We have no fear now of introducing ammonia into the blood, as we might have had at first. To all of these cases we are also giving from 10 to 12 grains of quinine daily.

This is a most instructive group of cases of poisoning by coal-gas or of carbon monoxide combined with carbon dioxide. These cases are not rare; they are found under circumstances such as these were where the coal-gas from a stove burning in a close room poisons the air. The same kind of cases occur when charcoal fumes are set free in an apartment, which is a favorite mode of committing suicide in France, by leaving a charcoal-stove burning without allowing any vent for the gas to escape from the room. Coal-gas poisoning also happens when, owing to a defective flue, the gas from a furnace passes into a sleeping-room, as occurred in two very severe instances in elderly people,

one of which I saw with Dr. James Graham, of this city, a few years ago, and both of which he afterward reported to the College of Physicians.<sup>1</sup>

No matter how produced, the symptoms of these cases are alike. When the poisoning is slight, or the patient not very susceptible to the poison, for some come only slowly under its sway prior to the stage of unconsciousness, there will occur headache, irritability of temper, a disposition to be let alone, and vague muscular pains. On the other hand, when the impression is at once deeper, or there is a longer exposure, the patient lies before you in an unconscious condition. His face is flushed; sometimes, in place of actual congestion or blueness, there is a cherry-red appearance of the mucous membrane. The frown on the face is very significant, and we observed it in all the cases that were unconscious. The respirations are accelerated. An irritative cough is present, and this is more than mere local throat irritation, as several of these cases prove. You will soon find that signs of congestion of the lungs manifest themselves, with bronchial râles and the like. While speaking of the congestion, I told you that it affects both of the lungs; I will now add that the skin on the general surface of the body may also show spots of congestion. There were present in two of the cases (G. T. and V. V.) bluish spots, as if the blood had settled at the lower part of the chest and back, very much like what is often observed *post-mortem*.

The temperature of the cases is peculiar. Two showed depressed temperature (to 97°) for a time, but only early in the case. This leads us to believe that the statement made by some observers is correct, that the temperature in coal-gas poisoning is depressed. But it is not always so, nor, as we see here, does it stay depressed; it soon rises to 102° or 103°, and remains high, especially when there are chest-symptoms. The low temperature is the earliest temperature, and may be of but very short duration. The pulse is accelerated and feeble, and the character of the first sound of the heart corresponds to the character of the pulse.

Let us look at the urine-record. It indicates disturbed action and congestion of the kidneys. It shows albumin, mostly only in traces, though in the fatal case the urine was highly albuminous; in some of the graver instances blood with hyaline casts was present, and, as a very general rule, a heavy deposit of urates, especially of the urate of ammonium, and of oxalates. Sugar we did not find.

With reference to the intestinal symptoms, we were struck with the heavily-coated tongue and the constipation. But far more significant are the general soreness of the body, the muscular pain and tenderness, the desire to keep quiet, to prevent the acting muscles from being brought into play. Undue sensitiveness of the skin did not coexist: free perspiration was common.

I have now grouped all of the symptoms except those belonging to the nervous system. The condition is generally one of deep stupor. The pupils respond sluggishly to light, but are equal and normal. In one of the cases—the fatal case, presently to be described—there were several convulsions; a number showed a

<sup>1</sup> Transactions of the College of Physicians of Philadelphia. 3d ser., vol. viii.

tendency to contraction of muscles. Let me add that general irritability of temper and desire to be let alone existed to a marked degree.

You will ask, What becomes of these cases? When they get well, do they at once get thoroughly well? No! They do not. Indeed, long after the poisoning there may be striking anemia, and fresh nervous disorder may develop. I have already spoken of the case that I saw with Dr. Graham. After she recovered from all of the acute symptoms, on the forty-second day of her illness, aphasia and paralysis came on and remained for weeks.

Before proceeding, I may allude to the fact that the symptoms of coal-gas poisoning may exist in a mild degree from the chronic coal-gas poisoning that goes on in many an ill-ventilated office and room, and headache, depression of spirits, and a tendency to fall asleep are especially prominent symptoms. A very striking instance of the kind is reported by Dr. Woodbury, in the same volume of the *Transactions of the Philadelphia College of Physicians* as contains the report of Dr. Graham's cases.

With regard to the pathological changes caused by coal-gas poisoning, we may see them in the specimens from the fatal case already referred to. The man died with congestion and some edema of the lungs. The notes of the case are as follows:

CASE VI.—F. C., on admission, was absolutely unconscious. The pupils were equal, neither contracted nor dilated; the conjunctivæ were scarcely sensitive; the face was somewhat flushed, lips and ears rather blue; the feet were cold. Temperature 100.6°; pulse 134, very weak; respirations 40, marked by stertor. Muscular irritability was increased, the arms were folded across the chest, and the thumbs strongly flexed upon the palms of the hands; attempted movement of the arms met with powerful resistance. An examination of the chest detected numerous râles. The bowels moved involuntarily twice before admission, and the urine had to be drawn by a catheter. He was given digitalis tincture, 20 minims, with atropine,  $\frac{1}{100}$  grain, hypodermatically, because he was unable to swallow. Whiskey was similarly administered, 30 minims every hour, and hot bags were applied to the extremities. He remained most of the day in stupor, with laborious, rather stertorous breathing. In the afternoon, he had slight convulsive movements, during which his breathing became worse; he looked as if he were dying. He was bled fifteen ounces, and oxygen-inhalations were begun, a gallon being administered every fifteen minutes. The breathing improved and remained so for a short time after each inhalation; the inhalations were continued until three hours before death.

The record, made at 6 P.M., was as follows: "Face flushed, ears and lips dark, cheeks puffed out with each expiration, breathing irregular, 46 per minute; râles on both sides of the chest. He is generally quiet, but moans at intervals. There is occasional muscular stiffening, especially in the arms; the hands are bent on the wrists, fingers and thumbs are strongly flexed upon the palms. Pulse weak, irregular, 120 to the minute; temperature 102°. The oxygen acted favorably, causing better pulse and quieter breathing. At 8 o'clock his breathing became much involved and stertorous; he was sweating excessively. He was ordered tincture of digi-

tal and atropine, as before, with the addition on two occasions of one-eighth grain of morphine. He was much oppressed, and had convulsive tremors.

At 11 P.M. he seemed better; his pulse was 112 and of good volume; temperature 101°; respirations still rapid; but he had opened his eyes and his breathing was more regular. His color was also better, and in general he seemed improved. The oxygen was decreased at this time to one gallon every half-hour. At 11.50 convulsive movements began in the left arm, and then extended to the right arm, finally becoming general; there were rigidity and stiffening of the whole body, accompanied by convulsive movements of the extremities. At 1.25 A.M. (December 2d) he had another and a much more severe attack, lasting fifteen minutes, in which his respirations ran up to 70 in the minute. At 2.30 A.M. he was sweating freely; at 3.25 and 4.25 A.M. he had a hypodermatic injection of morphine, atropine, and digitalis. At 3.30 the temperature was 104.6°, his pulse 160, respirations 40. He was sponged with cool water, after which his temperature dropped to 98.8°, and his respirations were so shallow that he was unable to inhale the oxygen. During the night he had whiskey hypodermatically every hour and digitalis and atropine. After 3 A.M. oxygen was again given, one gallon every fifteen minutes.

The quantity of urine passed in the first twenty-four hours was thirty-seven ounces. On admission it was clear, 1022, acid, and free from albumin. On the evening of the same day it was clear, 1022, and contained a trace of albumin and a few hyaline casts. The next morning it was turbid, 1030, acid, very albuminous (about 7 per cent. by bulk, estimated after boiling), and showed urates in abundance, also a number of hyaline casts and a few epithelial cells; no blood was seen, but many crystals of urates, especially urate of ammonia.

On the second of December he grew steadily worse. The temperature rose to 106° in spite of repeated sponging; it was generally between 104° and 105°, being temporarily reduced by the sponging. He remained in an unconscious condition all day, with muscular twitchings, and at 5 P.M. he had a slight convulsive attack. The hypodermatics of whiskey, digitalis, and atropine were kept up; he perspired a great deal, except directly after the hypodermatic injections of atropine. The breathing continued rather stertorous, occasionally assuming a Cheyne-Stokes character. The pulse remained frequent and weak. At 6 in the afternoon all treatment was stopped, as he was moribund, and he died about three hours afterward."

The post-mortem examination was not made by our pathologist, but by the coroner's physician, who permits us to show you these specimens. Here are the lungs, kidneys, spleen, liver, and heart, and this is the record:

"There was moderate rigor mortis. Hypostatic congestion was most marked on the under surface of the body. The back was reddish blue; this color was also seen on the legs. The examination of the viscera exhibited very little change beyond congestion; they were uniformly congested and bluish, or dark red. The bronchial mucous membrane showed marked redness, and was covered with muco-purulent secretion. There was some edema of the lungs, but, on the whole, not as

much as his breathing during life seemed to indicate. The right heart contained a small, ante-mortem clot; the left ventricle was firmly contracted and empty. The kidneys were much congested, as was also the spleen. The kidneys were examined microscopically, and found not to be in a state of fatty degeneration, a condition which has been stated to be present in poisoning from the carbonic oxides. The blood throughout the whole body was of a lighter color than normal. This was especially so in the lungs, the blood in which was of a brighter shade of red than that usually seen, though not positively scarlet. The blood was also markedly liquid, and the coagula were few and small."

I want to call your attention to the color of the lung-tissue. Of course, the lung is congested but it has not the deep color that the congested lung usually has. It is rather more of a cherry color, such as has frequently been noticed in the cases that have been reported. I regret that the blood was not microscopically examined, but the autopsy was not held at the hospital and we had no control over it. The blood is said to contain hemoglobin deprived of oxygen by the displacing power of carbon monoxide gas, which not only displaces the oxygen, but interferes with further oxygenation—the carbonic oxide having a strong affinity for the hemoglobin, so strong that it suspends the oxygen-absorbing function of the blood—so that it is not merely the case that the blood has been poisoned by absorption of the coal-gas, but this has also seized upon the oxygen in the blood corpuscles, and combined chemically with the hemoglobin, rendering it unfit to further perform its function. You see in this, why it is that the mere administration of oxygen and fresh air is not enough to insure recovery. It was to get rid of the damaged blood that the patient was bled, with the view of taking away some of the devitalized blood; indeed, of not only relieving congestion, but of giving him a better chance to make fresh blood. He was too deeply poisoned to recover. A further point suggests itself in this connection—whether transfusion of blood may be of use. It has been practised and, although apparently rational, it has not been successful. It has occurred to me that we might gain valuable time by practising saline intravenous injections in the severe cases of coal-gas poisoning. This, with previous venesection to remove the changed blood, and with forced feeding, might make new blood so rapidly as to save life. But I throw this out as a suggestion rather than as an expedient actually employed.

## CLINICAL MEMORANDA.

### TRACHEOTOMY FOR OBSTRUCTION OF THE PHARYNX, WITH REMOVAL OF MUCOUS POLYPS FROM THE NOSE.

BY WILLIAM W. ASHHURST, M.D.,  
RESIDENT PHYSICIAN IN THE EPISCOPAL HOSPITAL, PHILADELPHIA.

[Service of Dr. THOMAS R. NEILSON.]

On the night of January 23, 1891, a request came to the hospital to send the ambulance for a boy who was stated to be choking to death from a tumor in the nose and throat. I subsequently learned that this growth

had been present for about five years, and had been constantly increasing in size, but it had never before produced any serious discomfort. It had been partially removed two years before, but had soon reached its former size again. Now, within a few hours, it had become so much enlarged that the patient seemed in danger of suffocation.

Not wishing to call out the ambulance for what was probably only an alarm created by the nervous apprehension of relatives, I walked to the house, and found that the severity of the case had not been exaggerated.

The patient, Alexander W., a lad seventeen years of age, was sitting up in bed, supported by pillows, and grasping the bedclothes and mattress with both hands, so as to bring into action the accessory muscles of respiration. He was cyanotic, and, during inspiratory efforts, supra-sternal and infra-sternal depression was very marked. He held his mouth widely open, and upon looking into it there was apparent a prominence of the soft palate downward and forward, forming a vertical, slightly convex wall, not more than two inches behind the incisor teeth. The junction of the hard with the soft palate was marked by a well-defined crease, and between the tongue and the soft palate there seemed to be absolutely no space for the passage of air. Presenting at the left anterior nostril was a mucous polyp, about the size of a small cherry.

Death from asphyxia seeming so imminent, I decided to perform tracheotomy at once. In the condition in which the boy was, any attempt to remove the obstruction was obviously out of the question. With a scalpel from my pocket case, I cut down on the trachea as rapidly as possible, and opened it just below the cricoid cartilage. What little bleeding took place ceased spontaneously as soon as the trachea was opened, and almost immediately all the alarming symptoms disappeared. As soon as the ambulance could be brought, a tracheal tube was inserted, and the patient was removed to the hospital.

From the time of the operation until the arrival of the ambulance he slept very profoundly, and he remained quiet and drowsy even on the way to the hospital. Upon his arrival there, however, he became very much excited, and, as if in delirium, tried to get out of bed, and showed other evidences of cerebral disturbance. These soon disappeared, however, and in two days his mind had returned almost to its normal condition.

Within a few hours after his admission to the hospital he became able to take liquid nourishment with considerable comfort, so rapidly did the obstruction shrink in size when the dyspnea and the consequent cyanosis and general congestion were relieved.

On January 26th, no unfavorable symptoms having appeared, Dr. Neilson proceeded to remove the obstruction. A considerable quantity of bloody, purulent matter had been discharging from the nose ever since the patient's admission to the hospital, and now the small mucous polyp at the anterior opening of the left nostril had almost completely disappeared. He was etherized by inhalation through the tracheal tube.

It was found impossible to introduce the slender, flexible wire loop of the Jarvis snare, unsupported, past the obstruction; so threads passed from the anterior nares through the posterior by means of a Bellocq's

canula were used as guides, and the wire loop was drawn by this means through the nose until it appeared in the pharynx, below the seat of obstruction. Introducing his fingers into the pharynx from the mouth, the operator now slipped the wire snare around a large growth the root of which was attached to the posterior part of the left middle turbinated bone, and, severing the attachment, removed through the mouth a mucous polyp, ovoid in shape, and about the size of a hen's egg. In the same manner a similar growth, probably even larger, with a corresponding attachment, was removed in fragments from the right nostril, and several smaller ones, the attachments of which were anterior to those of the larger polyps, were removed through the anterior nares.

By means of an insufflator, both nostrils were now coated with a fine layer of iodoform, and plugged anteriorly and posteriorly; both pluggings were secured in place, and their subsequent easy removal assured, by attaching to them strings passed through both nares with the Bellocq's canula.

On January 31st the tracheal tube was removed, and on February 9th the patient was allowed to get out of bed. He was discharged from the house, and referred to the out-patient department, with the tracheal wound closed and the skin healed over it, on March 16th.

It was noticed at the time of his admission that his hearing was very defective; at the time of his discharge, this defect had very markedly improved, although no treatment had been especially directed to the correction of this symptom.

Since his discharge from the house, the extremely hypertrophied left middle turbinated bone has been reduced to its proper size by repeated applications of a saturated solution of chromic acid, and now the chief indication seems to be for an operation to straighten the nasal septum, which is so deviated toward the right as to almost completely prevent a view of the interior of the right side of the nose. Air, however, passes very freely through both nares.

#### PECULIAR CASE OF PUERPERAL ECLAMPSIA.

BY G. A. HEIDNER, M.D.,  
OF FREDONIA, WIS.

The following case seems of interest principally on account of the peculiar onset and character of the convulsions.

Mrs. R., a primipara, was without any history of kidney disease up to two weeks prior to her confinement, or anything unusual during gestation. During the two weeks previous to my first visit, edema, beginning at the feet, had rapidly progressed upward until it involved even the hands and face. The labia majora were enormously enlarged and painful, with serous oozing through the skin.

At my first visit, April 19, 1891, I found the patient as described, and perfectly rational. She assured me that it would be at least four weeks before the expiration of full term. I punctured the labia majora, giving exit to a surprising quantity of serous fluid, and this afforded great relief. I ordered hot fomentations to the edematous extremities, rest in bed, a milk diet, and teaspoonful doses, every four hours, of the following

mixture: Tinctura digitalis, ʒijss; hydrarg. chlorid. mit., grs. x; glycerini, ʒij; aqua ad ʒij. The urine was scanty, its specific gravity high, and it contained 25 per cent. of albumin per volume. The bowels were constipated.

At 10 P.M., twelve hours later, restlessness and headache set in, followed shortly by purging and vomiting, and a little later by amblyopia. At 6 A.M. purging and vomiting ceased, but total blindness developed in a few hours, and headache and restlessness became extreme. Twenty grains of antipyrin were given, but were almost immediately rejected by the stomach. About an hour later a hypodermatic of morphine with atropine was given.

The patient had her first convulsion at 9 A.M. The seizure was mild, and did not last more than half a minute. The peculiarity in the onset of this convulsion, as well as in the subsequent ones, was that all the usual prodromata—*risus sardonius*, *blepharospasm*, etc.—were absent. From the usual restlessness she passed into a state of clonic spasm that soon changed to a tonic contraction of all the muscles, producing a rigidity of the entire body with almost complete absence of motion. Cessation of respiration was observed, and no heart-action could be detected. Chloroform seemed of little or no value in these attacks, because there were no symptoms indicating their approach.

Immediately after the first convulsion ended, I gave an enema of chloral and bromide of potassium, of each thirty grains, and telephoned for my colleague, Dr. A. F. Fuchs. The woman had another convulsion fifteen minutes later, from which she went into a comatose state, and did not regain consciousness for twenty-four hours. As she had not complained of labor-pains, I began to consider the advisability of inducing labor. Upon examination, I was surprised to find the os uteri dilated to the size of a silver dollar, and that the contractions were good. A third and a fourth attack occurred at 10.30 and 11 A.M., respectively. The enema of chloral and bromide of potassium was repeated after the third seizure, but could not be retained on account of the descending fetal head, and morphine was, therefore, again resorted to.

The os uteri being fully dilated, and labor progressing satisfactorily at 11 A.M., the patient was anesthetized and kept in this condition until delivery at 11.30. Twenty minutes later the placenta was normally expelled. The post-partum hemorrhage was very light, and the case looked quite promising until 12 M., when, without any warning, a far more serious convulsion set in, followed in a few minutes by another. To all appearances the case was rapidly tending toward a fatal termination. At this juncture the left median basilic vein (the cephalic could not be easily found) was opened, and about eight ounces of blood were withdrawn. Soon, another convulsion came on, much milder than the two just preceding. The pulse still being quite full and hard, six ounces of blood were taken from the right arm. The pulse then became soft. Only one very mild convulsion occurred subsequently to the last venesection. The sedative enema was repeated at 2 P.M., and, as indicated by the restlessness, was repeated at intervals of from one and one-half to three hours until midnight.

At 6 P.M., six ounces of urine were withdrawn by

means of a catheter; the urine contained 50 per cent. of albumin per volume. No microscopic examination was made. The skin was hot and dry, and the temperature 102° F. At this time two drops of croton oil were given by the mouth, and our patient was wrapped in a flannel blanket wrung out of water as hot as the hand could bear, and an oilcloth, applied externally to that and closed tightly. The blanket was changed at intervals of from one to two hours. The patient perspired freely, and became much more quiet. The croton oil having produced no effect, a second dose was administered at 11 P.M. *per rectum*. Free catharsis began at midnight and continued for a few days. At 1.30 A.M. a hypodermatic of morphine and atropine was given. On the morning of April 20th the patient was easily aroused, and was quite rational. Vision was beginning to return, but she had no recollection of what had occurred during the preceding twenty-four hours, and would not take her babe. The urine was scanty, of high specific gravity, and contained 50 per cent. of albumin per volume. She was now put on the digitalis and calomel mixture as indicated. There was no lochia.

On April 21st the urine was slightly increased in quantity, and there was some diarrhea; the temperature was 100° F., and the pulse 115.

Diuresis and diarrhea were marked on the 22d. The specific gravity of the urine was 1025; there was 25 per cent. of albumin per volume. Lochia began in the evening with very marked pain over the hypogastrium, which subsided as soon as the flow began. The patient was now put on a tonic mixture, and she made a rapid and complete recovery.

It is to be observed that—

1. There were no premonitory symptoms to indicate the approaching seizures.
2. The convulsive seizures bore no relation to the uterine contractions.
3. Unless constantly inhaled, chloroform was useless in preventing the onset of the seizures, or in modifying their severity.
4. There was great advantage from venesection, the convulsions continuing after delivery, and the pulse being full and hard.

#### THE APPEARANCE OF NERVOUS SYMPTOMS IN THE EARLY STAGES OF DIPHThERIA.

By WILLIAM C. DABNEY, M.D.,

PROFESSOR OF THE PRACTICE OF MEDICINE AND OBSTETRICS, UNIVERSITY OF VIRGINIA.

It is well known that neuritis, or symptoms pointing to neuritic trouble, occur late in the course of diphtheria, or as *sequela* of the disease. Two cases have recently come under my observation, however, in which very marked numbness and tingling of the limbs, especially of the arms, occurred at the commencement of an attack of diphtheria.

W. M. B., aged ten years, was taken with a sore-throat on October 12, 1891; the false membrane was at first confined to the tonsils and uvula, but the nose subsequently became involved. There was considerable swelling at the angles of the jaw.

On the second day of the attack the boy complained of tingling and numbness in the limbs, especially in the

arms, but there was no apparent diminution of tactile sense or of the sense of pain, nor was there any motor paresis. The tingling and numbness, however, were sufficiently great to occasion much discomfort. He was given  $\frac{1}{10}$  gr. of bichloride of mercury and 15 drops of muriated tincture of iron, in a teaspoonful of glycerin, every two hours, his throat and nose being thoroughly sprayed just before each dose of the bichloride mixture, with peroxide of hydrogen and water, one part to six. In addition to this, every two hours he took a tablespoonful of brandy in half a glass of milk. The case ran a favorable course, and ended in recovery. The numbness and tingling lasted three or four days, and disappeared gradually. Two weeks after apparent recovery, there was marked paresis of accommodation, but no other paralytic symptoms developed.

The second case occurred in the same family, and was almost precisely similar in character. B. B., aged eight years, was taken sick on November 13th, with severe headache, fever, and sore-throat. There was at this time a small spot of membrane on one tonsil only. With the exception of sore-throat, the only complaint made by this little girl was of numbness and tingling in her limbs; she said they were "all the time asleep." This numbness appeared on the first day of the attack, and lasted three or four days, passing off gradually. The false membrane extended to the uvula, and later to the nasal cavity, and there was considerable swelling of the neck. The same treatment was used as in the first case, and the attack ended in recovery. Up to the present time (December 12th) there have been no paralytic symptoms.

The occurrence of numbness and tingling at such an early period of the disease I have not seen before, nor can I find any cases of the kind recorded. It caused me much anxiety, which, as it turned out, was needless, as both cases pursued a mild course and ended in recovery; but my fear was that such marked nervous symptoms occurring thus early might indicate a degree of nervous disturbance that would lead to serious consequences.

#### ANOMALOUS CONGENITAL FUNCTION: ASSOCIATED SYNCHRONOUS MOVEMENTS OF UPPER EXTREMITIES.

By S. D. SWOPE, M.D.,  
OF MARION, KENTUCKY.

So far as I know, a case similar to the one I report is not chronicled in medical literature.

T. H., a farmer of good habits and healthy family, tall and muscular in form, well developed and healthy, consulted me on April 23, 1891, with a septic wound of the forearm made by a wagon singletree-hook. He explained that the wound had been doing well and, he thought, healing rapidly, until a few days previously when, with the wounded arm in a sling, he attempted to pick up some trash from the ground with the hand of the uninjured arm.

He then explained that all his life whenever he attempted to do anything with one hand or arm, synchronous and similar movements were made with the other hand or arm. This was something new to me and I naturally felt incredulous, but after considerable examination satisfied myself that his statement as to the

anomalous nerve-function was correct. Moreover, this peculiarity was transmitted to three of his eight children. Though the movement of his left hand and fingers gave him much pain, immersed as they were in a hot-water bath, any movement of the right hand or fingers produced synchronous movements in the left. If he raised his right hand to his head, the left would involuntarily move as if to leave the water-bath. If he scratched his head with the right hand, the fingers of the left would move as if in the act of scratching.

His little boy, nine years of age, was called, and on holding his right hand between my palms and directing him to scratch his head with the left, the confined hand endeavored to move, though held firmly. The father, in passing a dish at the table, always takes hold of the table with his right hand to prevent it following the left as the dish is passed. If he carries a basket on his right arm, the left is held in the same manner. When writing with his right hand, the left imitates its movements. In short, whatever his right hand does his left imitates, and *vice versa*.

To keep the left hand immovable, the right must be confined in a fixed dressing.

#### INTESTINAL ANTISEPSIS IN TYPHOID FEVER BY MEANS OF BISMUTH SUBIODIDE AND SALOL.

BY J. D. FARRAR, B.A., M.D.,  
RESIDENT PHYSICIAN, COOPER HOSPITAL, CAMDEN, N. J.

[Service of DR. E. S. B. GODFREY.]

I WRITE in commendation of the plan in practice at this hospital, of giving bismuth subiodide and salol in typhoid fever for purposes of intestinal antiseptics. The test of the accomplishment of intestinal antiseptics is the deodorization of the stools. This method of treatment certainly seems to reduce tympanites, control diarrhea, and prevent hemorrhage—the latter complication being rare when the antiseptics is early secured and persistently maintained. This treatment will modify the severity if it does not limit the duration of the disease. Our rule is to begin the administration of the drugs mentioned, alternately, whenever diarrhea exists, and to continue the same throughout the disease, aiming to keep the stools thoroughly disinfected. Twenty-four cases (six during Dr. Godfrey's term of service) have been thus treated in the hospital, and the foregoing recommendation is the outcome of a study of the results thereby obtained.

#### A CASE OF CHLOROFORM-POISONING.

BY JULIAN A. HIELSCHER, A.M., M.D.,  
OF MANKATO, MINN.

ON September 5, 1891, I was hastily summoned to one of our hotels to attend a travelling man who had tried to commit suicide by taking chloroform. Upon entering the room, a very strong odor of this drug was observed. On the bed I found a man, about twenty-four years of age, in a comatose condition. His face was pale, his respiration very slow and shallow, the pulse imperceptible at the wrists, a cold, clammy feeling of the body and lower limbs, and the conjunctivæ sense-

less. The pupils were *dilated*. There had been no vomiting, and, as he was unconscious, I could not use the stomach-pump or give an emetic. I then employed  $\frac{1}{16}$  grain of apomorphine hypodermatically, which in a short time produced the desired effect. The vomit was almost a gallon of beer (the patient had been upon a spree), which was strongly impregnated with the drug. Being still unable to swallow, I gave him from time to time hypodermatic injections of brandy, and employed artificial respiration, at the same time surrounding him with hot bottles and blankets.

After several hours of this kind of treatment he improved slightly, but not to my satisfaction, and I then administered a quart of strong, hot, black coffee *per rectum*. This acted like a charm; the breathing became more natural, the pulse improved, and consciousness returned. In the meantime I had, by a catheter, withdrawn over a quart of urine, which also emitted the odor of chloroform.

The next day I had the patient removed to Tourtellott Hospital, and a week later I discharged him.

The points of interest are as follows: 1st, the amount of chloroform taken was two ounces; 2d, the time was seven hours after taking before medical aid reached him; 3d, dilated pupils, later on contracted, then natural; 4th, odor of chloroform in urine, breath, and vomit.

#### MEDICAL PROGRESS.

**Excision of an Obliterated Aneurism.**—SCHOFF (*Wiener klin. Wochenschr.*, No. 45, 1891, p. 840) has recorded the case of a man, forty-six years old, who presented trophic changes and other evidences of disturbed innervation, circulation, and function in the right arm, dependent upon an obliterated aneurism of the right subclavian artery as large as a man's fist, behind the clavicle and great pectoral muscle. On account of the gravity of the symptoms, in conjunction with a possible doubt in diagnosis, operative interference was determined upon. Artery, vein, and nerves were found adherent. The coats of the aneurism were thickened; the cavity was filled with dense coagula. The afferent division of the vessel was pulsatile and as large as the little finger, while the efferent division was obliterated and reduced to the thickness of a lead-pencil. The former was ligated with strong silk and the aneurism was carefully dissected out. The operation was followed by a disappearance of the distressing symptoms and a resumption of the functions of the right upper extremity.

**The Etiology of Posterior Spinal Sclerosis.**—ERB (*Berliner klin. Wochenschr.*, Nos. 29 and 30, 1891) has fortified the position that he has taken as to the importance of syphilis as an etiological element in the development of posterior sclerosis. He has carefully studied more than 550 cases that came under his own observation, in almost 90 per cent. of which he was able to elicit positive evidence of a history of syphilis. In the remaining 10 per cent. such a history could not be obtained. To verify the accuracy of his results, Erb made a series of counter-observations in 5500 cases of various kinds of disease, of which it was shown that but 23 per cent. were syphilitic, while 77 per cent. were not syphilitic.

Nearly half of the cases of tabes developed within ten years of the primary infection, while 88 per cent. developed within twenty years. Other causes of subordinate importance, alone, associated, or in conjunction with syphilis, were exposure to cold, excessive muscular activity, sexual excesses, traumatism, and a neuropathic predisposition.

**Influenza and Psychoses.**—In a paper read before the Medical Society of London, SAVAGE (*Lancet*, No. 3558, p. 1043) quoted the conclusions arrived at by Dr. Leledy in regard to the relation between influenza and the psychoses. 1. Influenza, like other febrile affections, may establish a psychopathy. 2. Insanity may develop at various periods of the attack. 3. Influenza may induce any form of insanity. 4. No specific symptoms are manifested. 5. The rôle of influenza in the causation of insanity is a variable one. 6. Influenza may be a predisposing or exciting cause. 7. In all cases there is some acquired or inherited predisposition. 8. The insanity is the result of altered brain-nutrition, possibly toxic. 9. The onset of the insanity is often sudden, and bears no relation to the severity of the attack of influenza. 10. The curability depends on general rather than on special conditions. 11. The insane are less disposed to influenza than are the sane. 12. In rare instances, influenza has cured psychoses. 13. The insane may have a mental remission during the influenza. 14. There is no special indication in treatment. 15. Influenza may lead to crimes and to medico-legal issues.

**Extirpation of a Tuberculous Kidney.**—SCHUCHARDT (*Deutsche medicin. Wochenschr.*, Sept. 3, 1891), at the Congress of German Surgeons, reported a case of cystitis in the course of which pyonephrosis developed. Incision afforded but temporary relief. Tuberculosis was suspected, and confirmed by reaction to tuberculin. Other treatment failing, the kidney was removed. Following the operation the excretion of urine was diminished, uremic symptoms appeared, and on the fifth day the urine was suppressed. Death took place on the ninth day. At the autopsy the pelvis of the kidney was found occupied by calculi; the renal structure was almost entirely wanting. Histologically, no changes were found that could be ascribed to the action of tuberculin; the giant-cells were in places disintegrated by the invasion of leucocytes; but bacilli were still to be found. Necrosis of the epithelium of the remaining kidney was the probable cause of the development of uremia.

**Chronic Alcoholism with Obstinate Hiccough.**—SMART (*Edinburgh Medical Journal*, September, 1891) recently presented to the Edinburgh Medico-surgical Society a case of chronic alcoholism with hiccough of three weeks' standing and so obstinate as to prevent sleep and the ingestion of nourishment. Nutrient enemata and suppositories were administered. One-third of a grain of morphine sulphate was injected hypodermatically every three hours; and, to prevent toxic narcotism, chloroform was given by inhalation and by the mouth. At the end of forty-eight hours the patient had obtained seven hours' sleep. By the sixth day the singultus was controlled; by the ninth, feeding by the mouth was

resumed, the patient thereafter progressing toward recovery.

**The Vapor of Naphthalin in the Treatment of Whooping-cough.**—As a result of a considerable successful experience, CHAVERNAC (*Bulletin Gén. de Thérap.*, 40. liv., 1891, p. 337) recommends fumigation by means of naphthalin in the treatment of whooping-cough. About half an ounce of the drug is, on one or more nights, made to burn in a suitable vessel in the sick-room, the windows and doors being tightly closed. The cough at once moderates, the dyspnea and other symptoms are favorably influenced, and the attack is soon brought to an end. Complications may contra-indicate the employment of the treatment. Thus, individuals suffering with pulmonary tuberculosis cannot bear the treatment.

**Congenital Tuberculosis.**—At a meeting of the Société de Biologie, SABOURAUD (*La Médecine Moderne*, No. 43, 1891, p. 745) presented the specimens of an infant, eleven days old, in which symptoms of broncho-pneumonia had developed on the tenth day. Spleen and liver contained many tubercles with granular degeneration at the center, and containing bacilli at the periphery. The mother had died since giving birth to the child, and presented the lesions of pulmonary tuberculosis, with no involvement of the genitalia or of the breasts. The deduction is that the tuberculosis of the infant was congenital, the infection occurring by the umbilical vein.

**The Etiology of Erysipelas.**—JORDAN (*Archiv für klin. Chirurgie*, Bd. 42) has recorded a case of facial erysipelas, in which there was also a subcutaneous abscess in the frontal region, periosteal suppuration of the right fibula, a disseminated pneumonia of both lungs, peritonitis of the pubic bone and of a cervical vertebra, and in which only staphylococci pyogenes aurei were found. A nurse in attendance upon the patient subsequently developed erysipelas; in her case too only staphylococci pyogenes aurei were found.—*Münchener medicin. Wochenschr.*, No. 43, 1891, p. 767.

**Albumosuria.**—At a meeting of the Clinical Society of London, DICKINSON and FYFFE (*British Medical Journal*, No. 1614, p. 1206) presented a paper containing a report of twenty cases in which the urine contained albumose. It was suggested that what had previously been considered peptone, as found in the urine, was, in reality, in many cases albumose. From the results of experiments upon animals, it seems possible that the diarrhea, from which many of the patients suffered, may have been dependent upon the presence of albumose in the blood. Albumosuria was present in a number of cases of pneumonia of ordinary severity, but it was wanting in some virulent and fatal cases. The origin of albumose is ascribed to the existence of suppuration; its formation is probably dependent upon the activity of pyogenic microorganisms. Albumosuria has been observed in acute rheumatism, especially during the stage of absorption; it was frequently found in pneumonia. It is thought that albumosuria has no connection with disease of the kidney.

# THE MEDICAL NEWS.

A WEEKLY JOURNAL

OF MEDICAL SCIENCE.

COMMUNICATIONS are invited from all parts of the world. Original articles contributed exclusively to THE MEDICAL NEWS will upon publication be liberally paid for, and 50 reprints will be furnished instead of payment. When necessary to elucidate the text, illustrations will be provided without cost to the author.

Address the Editor: GEO. M. GOULD, M.D.,  
1004 WALNUT STREET,  
PHILADELPHIA.

Subscription Price, Including Postage in North America.

PER ANNUM, IN ADVANCE . . . . . \$4.00.  
SINGLE COPIES . . . . . 10 CENTS.

Subscriptions may begin at any date. The safest mode of remittance is by bank check or postal money order, drawn to the order of the undersigned. When neither is accessible, remittances may be made, at the risk of the publishers, by forwarding in registered letters.

Address, LEA BROTHERS & CO.,  
Nos. 706 & 708 Sansom Street,  
PHILADELPHIA.

SATURDAY, JANUARY 16, 1892.

## A NOBLE PROGRAM.

WITH justifiable pride the *British Medical Journal* points to the work in the interest of the medical profession that it has carried out in the past, and looks bravely forward to its coming duties. It aims at a close union for practical work of all the physicians of Great Britain and Ireland, that they may be "bonded together in fraternal coöperation through the British Medical Association, and in direct intercommunication through its *Journal* for the purposes of professional friendship and active influence on the public mind; for social progress, mutual enlightenment, and the attainment of a higher position and of greater influence in the State and in social life, not only for each individual, but for the whole body. By communication and coöperation the medical profession can achieve much more in the future than it has in the past."

That this is not sentimentalism is seen by the plan of campaign laid out for this year. Chief of all is the redress of the "cruel wrongs and grievous hardships of the Irish dispensary doctors," now "under a singularly inequitable and oppressive system." Next comes the restriction of the patent-medicine disgrace, that is fast becoming a genuine curse of civilization. The reform of the lunacy law

is also to be undertaken, and various other needed reforms are to be zealously entered upon.

From the *Journal's* sturdy business-like resolve, with conviction and confidence of success speaking in every line, we turn to our own country to ask if the medical profession here is undertaking the reformation of any such abuses. The reluctant answer must be that there are not the least indications even of the felt need of such work. Individualism, democracy with a vengeance, is the ruling passion. There is little or no united action, no attempt to do away with the wretched abuses everywhere flagrant. There is no common purpose or action toward elevating medical education, toward stopping the execrable shame of the diploma-mills. There is not the faintest hint of a common desire to fight down the national infamy of the patent-medicine business. The ruin wrought by the reckless abuse of hospital and dispensary charity is nowhere more iniquitous than with us. Quackery of a thousand types is nowhere else so rampant and impudent. Insidious or open advertising on the part of physicians has never before or elsewhere been made an art and practice so financially successful and so little rebuked. Europe has laughed into merited obloquy, silence, or non-existence the farce of homeopathy, while here we grant it subsidies from State treasuries, and Fashion dances to feed it with funds. The death-rate of naturally insanitary London, with her five millions of population stewed in vice and squalor, is by sanitation and practical preventive medicine kept far below that of our small cities, with every natural and social advantage favoring them.

But such things must continue until the entire profession of America bands itself together with a common feeling of self-respect and of duty devolving upon it—a duty at once to itself, but also and preëminently to humanity. When such time comes, instead of a multitude of tiny journals devoted to the vanities of editors and writers and to the interests of advertisers, it will then find a few fitting mouthpieces like the two great English medical journals, through which it can speak with power and authority.

## AMERICAN PORK IN GERMANY.

THE embargo upon the American hog in Germany was not removed without great difficulty, and the echoes of the struggle are still heard in the public and scientific journals of that country. An interesting and important contribution to the ques-

tion has recently been made by PROF. CARL FRÄNKEL (*Deutsche medicinische Wochenschrift*, No. 51), in which the proposition is maintained that the trichinæ are no longer active, but are practically destroyed in the process of curing the pork as followed in America. It is acknowledged that the percentage of the trichinæ is enormously greater here than in Germany. In the statistics of the Hamburg inspection, given for the six years ending 1883, inclusive, the total figures are as follows: American pork, 235,819 pieces, of which 3470 were infected; German pork, 304,625 pieces, of which 8 were infected. The percentage given by the German inspectors is rather less than that obtained by several observers in this country.

In support of the view that the trichinæ are killed by pickling, FRÄNKEL calls attention to the fact that the countries—such as England, France, Holland, and Belgium—that take a very large amount of American pork annually are almost free from trichiniasis; and he also states that it is doubtful if any well-authenticated instance of infection in Germany can be traced to American pork. In the epidemic at Bremen—if in the Düsseldorf cases—it is not possible to exclude the native pork as a source of infection. In proof of the fact that the processes of curing pursued in this country are, as a rule, fatal to the trichinæ, FRÄNKEL quotes a large number of negative feeding-experiments made by reliable men in Germany and in Holland, and concludes from them that in reality the American is very much less dangerous than the native pork. On the other hand, PROFESSOR FRÄNKEL does not refer to the Havre experiments that appear to show that the ordinary processes of curing have very little influence in killing the trichina, as animals were readily infected when fed with salted or smoked ham and bacon containing the parasites. In fact, the following experiment, given in CHATIN's work, would indicate that the trichinæ possess a remarkable degree of resistance to salting: On the 19th of April, 1881, a piece was taken from an infested side of bacon, placed in a bottle, covered completely with salt, and the cork sealed. The bottle was opened on the 1st of April, 1882, and the piece removed. After soaking in water for several hours, portions of it were fed to a mouse on the 4th, 5th, and 6th of April. The animal died on the 7th, and perfectly developed sexual trichinæ were found in the intestines. A second mouse fed in the same way died on the thirteenth day.

After all, the important protective measure is thorough boiling or roasting of the flesh, and to this practice is due the immunity enjoyed to so large an extent in this country, in England, and in France, as well as in South Germany. FRÄNKEL urges that the tedious and elaborate inspection that prevails in Germany has scarcely had results commensurate with its enormous cost. That it must be very imperfect is strikingly shown by the fact that the cases of trichiniasis, numbering yearly in North Germany at least 100, are all caused by eating the flesh of animals that have undergone inspection. It is also disadvantageous in giving to the people a dangerous confidence in the soundness of the meat, and encouraging them in the habit of eating it raw or only partially cooked. In the districts of Münster 250 inspectors in six years examined 118,000 swine with the result of finding only one trichinous animal. The conclusion of the whole matter, so far as Germany is concerned, is that the people should give up the practice of eating uncooked meat, whether native or American.

Coming from such a recognized authority, PROF. FRÄNKEL's article will no doubt be widely read, and is one of the most favorable that has appeared in defence of that much-abused and long-suffering animal, the American hog.

#### AMEBIC DYSENTERY.

WITHIN the past eighteen months, since the detection by OSLER of the ameba coli in this country, the question of its relation to dysentery has been carefully studied and its presence determined by MUSSEY, STENGEL, and others, in Philadelphia, and by DOCK in Galveston. An elaborate monograph on the subject recently issued from the Johns Hopkins Hospital by COUNCILMAN and LAFLEUR (*Johns Hopkins Hospital Reports*, vol. ii, fasc. 6-9), is the most valuable contribution to the clinical history and morbid anatomy of dysentery that has been made since the publication of WOODWARD's exhaustive treatise in the medical reports of the War of the Rebellion.

The study is based upon fifteen cases. The general clinical review by LAFLEUR, PROF. OSLER's assistant, is a clear and convincing statement in support of the view that amebic dysentery is a form of dysentery separate from ordinary catarrhal dysentery, and also from the diphtheritic varieties. Among the special features are the more chronic

course, the numerous intermissions and exacerbations, and the tendency to serious complications, particularly abscess of the liver. The stools in a case of moderate severity are stated to be liquid, brownish-yellow in color, containing mucus and streaks of blood, sometimes sloughs. There is less viscid, clear mucus than in ordinary catarrhal dysentery, and, as a rule, much less blood. As a case becomes more chronic the stools no longer have a dysenteric character, but are of the consistence and appearance of thin gruel. The reaction of the stools is generally alkaline. Frequently, attacks of constipation alternate with diarrhea. The amebæ are found in all varieties of the stools, and at all periods of the disease, being most abundant in the exacerbations; they may be present even after the evacuations have become normal. The amebæ can be readily seen, and move actively at the ordinary temperatures, though the motion is accelerated on a warm stage. The authors hold that the characters of the stools of catarrhal dysentery and of diphtheritic dysentery are different; the amebæ were not found in the twelve cases of catarrhal and three of diphtheritic forms that were under observation at the hospital. Tenesmus was absent in many of the cases, and the fever, as a rule, was slight, and in many instances transient. The complications of the series were most important, as may be judged by the fact that abscess of the liver occurred in three cases, abscess of the liver and of the lung in four cases, peritonitis with perforation once, without perforation once, and intestinal hemorrhage twice. Of these complications the abscess of the liver is most important, and was usually characterized clinically by pain, irregular fever, with sweats. In the hepato-pulmonary abscess, of which four cases are given, the sputa are almost pathognomonic, as originally noted years ago by BUDD, who states that "there is no matter like it expectorated in any disease of the lung itself." It is described as often bright-red at first, subsequently of a dull brick-red, brownish-red, or rusty-brown color. Amebæ are present in it, occurring in considerable numbers. They are constantly found in the liver-abscess associated with this form of dysentery, as first pointed out by KARTULIS. The description of the anatomical lesions is elaborate, and is illustrated by seven double plates, giving the histologic details of the changes in the intestines and in the liver. The conclusion is reached that the ulcers in

the colon in this form differ from those in other varieties of dysentery. The ulceration is caused by infiltration of the submucous tissue and necrosis of the overlying mucous membranes, and there is, as a rule, an entire absence of the products of purulent inflammation. The amebæ exist in numbers throughout the coats of the intestines, and in two cases were found in the peritoneum. In one case there were found throughout the liver numerous miliary abscesses, all of which, even the smallest, contained amebæ in numbers.

The life-history of the parasite remains to be worked out. KARTULIS has been able to cultivate the organism, but it is an extremely difficult matter to get pure cultures of the protozoa. It is most natural to suppose that the amebæ reach the intestines with drinking-water, probably in an encysted stage, in which they can resist the action of the gastric juice.

The disease is very chronic, and characterized by a special tendency to relapse. The treatment suggested is large rectal injections of bichloride of mercury (1:5000 and 1:3000), and injections of a solution of quinine of varying strength (1:4000 to 1:1000). Although the series of cases studied by these authors was unusually severe and the mortality high, in several instances the disease ran a mild course, and was rapidly relieved by the injections.

## SELECTION.

### SO-CALLED "HYDRARGYRUM LACTATUM."

A CASUALTY from the misuse of drugs is reported from Bay City, Michigan. Somebody blundered, and somebody else lost his life; so says the *Western Druggist*. A physician of that town fell into the habit of prescribing "hydrargyrum lactatum," meaning thereby a preparation furnished by a Chicago dealer in drugs, which is said to contain one part each of calomel and of bismuth subnitrate, and eight parts of milk sugar. This did no harm so long as the prescriptions were taken to the shops where the Chicago specialty was known. But the day came when a change in pharmacists was made by the patient. The new pharmacist ordered through his wholesale dealer a bottle of "hydrargyrum lactatum," and received a supply of Merck's "lactate of mercury." Merck's catalogue contains that item, with the price marked at \$1.00 an ounce. Chemistry recognizes "hydrargyri lactas," or mercurous lactate, and, although it is not often heard of in medicine, Watts's *Dictionary of Chemistry* describes its composition and properties. This preparation was dispensed three times before any injurious effects were noticed, but the fourth dispensing of it was followed by the death of the patient. An analysis of the drug is said to have shown the presence

of mercuric lactate as well as of the mercurous salt, and it is suggested that a reduction had been going on in the bottle after it left the wholesaler's hands. If this is the fact, and can be proved, it will tend to lighten the condemnation launched by the *Western Druggist* against the conductors of the Chicago drug-house for its "criminally reckless terminology," in that they adopted a harmful name to cover a comparatively mild "specialty." It will also tend to lighten the feeling of responsibility for this particular "accident" in the mind of the physician, against whom the *Druggist* alleges that his conduct was "little less than criminal," because he prescribed a substance about which he really knew nothing. There seems to be a fatality about nearly all these "specialties, or combinations made by some known-to-us-alone process;" sooner or later, they become the occasion of loss of life, or they get everybody into trouble who has anything to do with them. The remedy of known composition is not always safe, but it comports more thoroughly with the dignity of the profession to employ it, so that even if perchance a casualty should follow its legitimate use, it will not be necessary to resort to that most idiotic of excuses, "I did not know it was loaded"—the plea of those who point pistols at their best friends and kill them!—*New York Medical Journal*.

## CORRESPONDENCE.

### PSYCHOLOGIC ASPECT OF THE "KEELEY CURE."

To the Editor of THE MEDICAL NEWS,

SIR: There are some facts connected with this so-called "cure" that are worthy of the consideration of the medical profession. There are other phases that need but little investigation to warrant utter condemnation. Only a brief consideration of the medicinal agents used is necessary; it does not matter much just what agents are used. The sciences involved in the education of the liberal physician have something of a materialistic tendency, and we, as a profession, are prone to consider as of prime importance tangible material and obvious agencies of forces.

But we must not overrate the potency of material agents, neither must we ignore forces and agencies that we are cognizant of only by the light of reason and logic. It is not necessary to go over the ground of the pathologic anatomy of alcoholism. The physician knows the structural changes in the various organs and tissues of the body brought about by the habitual use of alcohol. He also knows that structural alterations in the brain, spinal cord, liver, kidney, and heart, are not overcome by any medicinal, mental, or moral methods of treatment.

As to the therapeutic application of the salts of gold, there is no new field of applicability. This auriferous element has without doubt more potency in the hand than it has in the stomach or in the circulation. The gold salts are acknowledged to be inferior to the iron salts in therapeutics. From a study of the physiologic action of the terchloride of gold, Hoffman, twenty years ago, conceived the idea that it would be of use in alcoholism, but careful and honest experiment and

clinical use failed to give any evidence of a utility greater than that possessed by the iron salts. From time to time the medical profession has had its exacerbations of "auric fever," but it has always been a self-limited disorder.

Who knows that in the so-called "gold cure" gold is used at all? A patient is injected with a solution, but who knows its analysis? The patient receives hypodermatic treatment and ceases to have an appetite for spirits. Why? Is it because the solution of some salt of gold circulating in the system has restored normal function to a cirrhotic liver, or rendered an inflamed stomach more anemic, or caused a cardiac hypertrophy to disappear? Is it because a human being, weakened physically, mentally, and morally by alcoholic excess, is suddenly converted by having a drug administered to him? Nothing like this. Nothing new, or occult. There has been no newly-discovered potency whereby we can so easily set at naught Nature's decrees. The pathologic changes brought about by excesses are not to be remedied in a day or a month by any agent at our command, or that we shall ever command. There are effects, however, produced by drugs on systems thus depraved. It is a well-established therapeutic fact that certain drugs for a time lessen the craving for alcohol.

Hypodermatic administration of certain cerebral and cardiac stimulants, such as strychnine, atropine, cocaine, and digitalin, will stimulate the cardiac and nervous system to a degree sufficient to render alcohol superfluous and even objectionable to the patient. What, then, are the important factors that Keeley uses? For we do not question but he has effected cures of dipsomania. Whether the patients lapse again, it does not matter, unless the lapse be immediate. If a person affected with dipsomania has his appetite allayed for a year, it is fair to say that he is cured so far as the craving is concerned.

We all know the mental condition of the inebriate. All physicians have seen the poor unfortunate one on the verge of delirium. They have seen how the intellectual faculties and perceptions are blighted. They have seen manhood shorn of its glory. They have seen that apathetic dependence on the decrees of fate, that intellectual inertia, consequent upon frequently repeated stimulation, and it is a psychologic fact that a mind thus weakened is more susceptible of receiving and accepting suggestion than one in possession of natural moral and mental vigor. The susceptibility of the human mind under certain conditions of accepting suggestion is known to every observer of life. We know that changes in belief may be brought about, and even sensations due both to functional and organic disease may be so far ignored or forgotten as to cease to be sensations.

We will not go into the details of hypnotism, or hypnotic suggestion, except in so far as it has to do with the subject in hand. The phenomena of hypnotism were never so clearly understood by the scientific world as they are to-day. It is the province of psychology to reveal the laws governing these phenomena, and it has been the function of this branch of science to lift the veil of obscurity, remove the charlatanism, and dispel the dogmas that have clung to this department of mental science for many years. With the fair-minded there no

longer remain the delusions with which the mesmerists of one hundred years ago surrounded the phenomena of hypnotism. We now disclaim magnetism as a factor in the production of the hypnotic state, and deny that only a certain few persons who claim to be endowed with extraordinary will-power are capable of inducing hypnosis. We no longer use the magic wand or the "luminous shadow" of Lord Lytton to induce somnambulism or catalepsy.

The authority alone of reputable specialists is sufficient endorsement for the facts of suggestion, and there are scores of men that have seen epileptic seizures prevented, the hallucinations of melancholia relieved, and paralyzes of months' duration immediately overcome by simple verbal suggestion.

But there is nothing in this beyond the comprehension of common mortals, if they will honestly consider all of the circumstances. If by a simple word of command a cerebral tumor that gave rise to epileptiform seizures had disappeared, or had trophic changes in an atrophied muscle been thus brought about, then we could justly consider such powers with awe; for we might then consider them supernatural. But the modern physician is denied any such supernatural power. The therapeutic application of hypnotic suggestion depends for its exercise upon an exact knowledge of definite but not occult physiologic and psychologic functions that any person of fair intellectual attainment can possess.

As suggestion is the factor in the production of the hypnotic state, so it is capable of producing a state of *susceptibility* entirely apart from lethargy, somnambulism, or catalepsy. This fact was pointed out by the school of Nancy, many years ago. The therapeutic application of suggestion has, as a basis, the fact that many dis-

tions and *mirabile dictu!* his thirst is lessened. The stimulants have done the initiatory work. The heart that has contracted feebly without alcoholic stimulation now pulsates more strongly under the effect of higher potencies. His tremor is lessened, and this he sees and takes courage; he feels that he is to be cured, for others have been cured in the same way. His mind throws off its lethargy, and he is all hope and determination. After a few such stimulating injections, together with the assurance of friends and of the physician, he believes, beyond any possibility of doubt, that he is to be free from desire for alcohol. He is convinced that alcohol is a poison and has no use in the animal economy.

That cures of dipsomania have been effected by Keeley, we do not deny.

That the hypodermatic injections are a factor in the cure we do not deny. But we assert that the chief factor is suggestion.

Very sincerely,

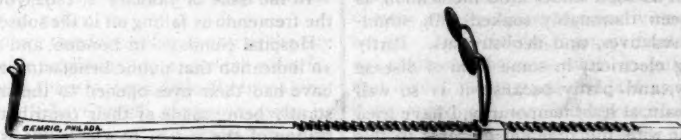
G. M. RANDALL, M.D.

AUGUSTA, MAINE.

#### SELF-RETAINING PALATE-RETRACTORS.

To the Editor of THE MEDICAL NEWS,

SIR: In an article by Dr. T. H. Weagly, of Marion, Pa., on "Self-retaining Palate-Retractors" (THE MEDICAL NEWS, September 5, 1891), which escaped my attention at the time, I see the following: "For thorough examination of the posterior nasal cavity and for various operations therein, such as the removal of adenoid tissue, galvano-cauterizations, and many of hypertrophied turbinates, the need of an effective self-retaining palate-retractor has long been recognized, both by surgeon and specialist. To meet this want the White Retractor, shown in Fig. 2, was brought out," etc.



eases of a functional nature can be cured or relieved by making the patient believe that a cure will be effected if the advice given is followed. In other words, we induce a state of credulity. And this fact is the explanation of another, one that is as old as disease, and as well known to every physician as the phenomena of respiration, viz., that the specific treatment of certain diseases is moral, and that, whatever else it may be, any form of medicine is a placebo. But it is necessary that this state of credulity be induced, and there are cases in which it is impossible for the physician to implant this faith without first using some material means of producing an impression on the system, though the effect may have no direct bearing on the disease to be cured. These are the facts taken into account in the recent methods used in the cure of dipsomania.

In his rational and sober moments, the poor unfortunate sees his downfall, he sees the "handwriting on the wall," and he is willing and anxious to be restored to manhood, to family, and to society. He will avail himself of any opportunity for such restoration.

He goes to this wonderful healer and receives his injec-

As a matter of fact, the first description of any instrument of the kind ever published was one devised by myself and published in the *N. Y. Medical Record*, January 14, 1888, with cut, and in the *Transactions of the South Carolina Medical Association* for April, 1888, and in a *Handbook of Diseases of the Nose and Throat*, by Carl Seiler, M.D., third edition, p. 63. Full credit for priority of publication was also given by Dr. Joseph White, of Richmond, Va., in the first description of his instrument. The accompanying cut will illustrate the difference between the two instruments, that represented in the figure being only a slight modification of the first instrument described.

As shown, the hook being a solid band instead of a wire loop, the tissues cannot bulge through and obstruct the view; and the tip being bifurcated and curved backward, the septum is neither scraped nor injured, but serves to steady the instrument. The catch on the slide is entirely automatic in its action, without screw or clamp. The arms are provided with metal or hard-rubber pads, and rest on the alveolar processes outside of the nose. They are securely retained there

by the pressure of the retracted palate, and never slip unless improperly adjusted. In addition, as they do not enter the nose, they can always be applied to any face without regard to configuration, etc.

A rather recent experience has served to impress upon me the great utility of these retractors. It was in the case of a patient to whose pharynx I made a galvano-caustic application, relying for guidance through the nose upon the irregular outlines of the inferior meatus. The result was a severe attack of otitis media acuta with diminished hearing and consequent great mental distress for a period of several weeks. The incident will effectually prevent me from ever making any application of a similar nature without the aid of a retractor and consequent absolute accuracy by ocular demonstration.

W. PEYRE PORCHER, M.D.

CHARLESTON, S. C.

### ELECTRICITY IN "LA GRIPE."

To the Editor of THE MEDICAL NEWS,

SIR: It is probable that every practitioner of repute in this city (and also in all other large cities) has his own method of managing influenza, and the variety of remedies employed, as seen by the files of the druggists, would lead an acute observer to think that the *specificity*, as a friend called the disorder, is more apparent than real, and that possibly a less varied and elaborate therapy would do as well in the cure of the unfortunates as that now suggested by writers, which includes almost all of the new remedies, and a big lot of the older ones.

My own list of drugs has been very small, and most of my cases get well as soon under little medication as those who have been thoroughly soaked with stimulants, antipyretics, sedatives, and deobstruents. Partly because I am using electricity in some form of disease liberally every day, and partly because it is so well adapted to relieve pain, at least temporarily, I have tried what could be done with the different currents in this troublesome affection, and it gave good results in the few instances in which it was employed. The first instance was that of a woman who had great soreness and pain in every region, but particularly in the legs and back, and with her I used galvanism, both generally and centrally, running the current up to twenty-five milliamperes. The first sitting gave her decided relief, and with the exception of the cough, which lasted for three days after the other symptoms disappeared, she was practically well in twenty-four hours after beginning the electricity. The next patient was troubled with the pain more particularly about the occiput, and had considerable sickness of the stomach and high temperature with it. A galvanic current applied to the nape of the neck (positive) and (negative) to the epigastrium, under an ascending current of thirty milliamperes, relieved the nausea at the first application, and dissipated the weariness and pain at the second, while the cough also was notably improved—ceasing in four days without any expectorant or other drug whatever. This person was unable to rise from bed when I saw her first, and was apparently very seriously ill, yet she lost all of the prominent symptoms in the short time indicated.

The next case was that of a child who suffered distressingly from the throat and chest symptoms—her influenza being as pronounced as in any of the instances in which my patients have been sick for a fortnight or more. I gave her a little fever-mixture, and applied galvanism to the pneumogastric—positive to the neck, negative to the solar plexus. The electricity was not given until my second visit, at which time she had not been relieved at all by the medicine taken; the first application shortened the paroxysms of sneezing and coughing fully one-half, and the next in the evening still further improved her condition, not alone as to the thoracic symptoms, but in all respects. Half a dozen applications settled the matter, and converted what was apparently a very threatening case into one not at all alarming, and in a week she was out and at school. The three were typical instances of grippe, and no one could tell from the outset, as far as symptoms were concerned, how bad the trouble might be in the future, yet each did well under electricity alone, for all the medicine, aside from the galvanism, was inconsequential. Might I ask my friends who are equipped with suitable apparatus to try galvanism? I am now looking into what faradism and static applications will do in this matter.

WILLIAM R. D. BLACKWOOD, M.D.

246 NORTH TWENTIETH STREET.

### "DISPENSARY ABUSES."

To the Editor of THE MEDICAL NEWS,

SIR: I am moved by the refreshingly vigorous editorials on "Dispensary Abuses," which have appeared recently in THE MEDICAL NEWS, to say a few words on this subject.

In the issue of January 2, 1892, you call attention to the tremendous falling off in the subscriptions on the last "Hospital Sunday" in London, and characterize this as an indication that public benefactors and philanthropists have had their eyes opened to the misuse that is constantly being made of their contributions. As an illustration of the extent to which this is done, and of the effrontery practised in the misapplication of funds donated for charitable objects, I would call attention to one of the annual reports issued by the oldest dispensary in the city of New York. We are told by the Board of Trustees that this dispensary had treated during the year 38,699 new patients, and a total of 102,818 cases; and in the same report the house-physician says: "All patients applying for treatment have received it *without question as to their ability to pay* [italics mine] for the services of an outside physician, and thus many have doubtless abused the charitable object of our institution." This statement has the merit of candor, if nothing else, but it becomes the height of impudence when it is associated in the same report with an appeal to the charitable for contributions, in which it is stated that the dispensary "assists the taxpayers in diminishing pauperism, and consequently crime," and helps "the poor to be self-supporting." It seems almost incomprehensible that shrewd and successful business men should put their hands into their pockets year after year to support such "charities," and allow statements like those quoted to pass unchallenged. Of course, the managers of these institutions seldom make the mistake of allowing their

house-physicians to print such reckless statements, and, consequently, those who are called upon to contribute are not often made acquainted with the true state of affairs. Again, is it not remarkable that, although the report to which I have referred was published and circulated two or three years ago, there has been no serious effort on the part of the trustees of this dispensary to remedy the evil? Surely this is an abuse of the funds entrusted to their care, and, as the gentlemen constituting the board of trustees are well-known and honored business men, we can only explain their failure to act because of the well-known and almost proverbial apathy of boards of managers.

Your closing remarks in the editorial referred to carry a stinging rebuke to many a young physician in this city; but do not blame them too much for their often unwilling part in encouraging "a cowardly sort of socialism," and for degrading their profession, until you have succeeded in so impressing the older and more influential members of the medical profession with a sense of the great wrong that they are constantly perpetrating upon their young professional brethren, and upon society at large, so that they will be willing to take the lead in this much-needed reform.

O.

NEW YORK CITY.

#### "SCARLATINIFORM EXANTHEM."

To the Editor of THE MEDICAL NEWS,

SIR: I read with interest Dr. J. Madison Taylor's note on "Scarlatiniform Exanthem," in THE MEDICAL NEWS of December 19, 1891. It seems to me that the case is probably one of erythema exfoliativum. There is an interesting paper on the recurrent form of this affection, by Dr. Henry William Blanc, in the *International Clinics* for October, p. 348.

I am very glad to see the description of any of the exantheas that resemble scarlatina, as, under the most favorable circumstances, there is much difficulty in making the diagnosis, and I believe much confusion exists in the minds of many members of the profession as to the difference between scarlatina and some of the other exantheas. The scarlatiniform variety of rubella very closely resembles scarlatina in its general appearances, and one is very frequently taken for the other. Very often an attack of erythema from indigestion is mistaken for scarlatina, but much more frequently a mild attack of scarlatina is pronounced roseola or erythema from indigestion.

When we consider the serious consequences that may follow even the mildest attacks of scarlatina, the importance of an early diagnosis is obvious, and I would be glad to see all questions relating to the diagnosis of these diseases discussed at length in the journals.

Yours very truly,

WHARTON SINKLER, M.D.

1600 WALNUT STREET, PHILADELPHIA.

#### THE PERCENTAGE OF ALBUMIN IN URINE.

To the Editor of THE MEDICAL NEWS,

SIR: I was much pleased to read in THE MEDICAL NEWS, G. M.'s criticism of the careless habit prevailing among medical men of speaking of the percentage of al-

bumin in urine. I have written and spoken so much upon this subject that I hesitate to take up the matter again lest it be regarded tiresome, although I seem to have made a very limited impression. It is true, as G. M. says, that the blood contains but 8 per cent. of albumin, and as the albumin of albuminuria comes from the blood, more than 8 per cent. is impossible, whereas in point of fact  $2\frac{1}{2}$  per cent. is about the maximum noted. What the writer meant, of course, was 50 per cent. of the bulk of urine tested. As the time, trouble, and apparatus required render it practically impossible for the vast majority of physicians to use the gravimetric method for albumin, and as appliances like Esbach's albuminometer are inaccurate, we must, for the most part, continue the method of measurement by bulk, which is, indeed, sufficiently accurate for practical purposes. If men will only say 25 per cent. or 50 per cent. of bulk, as it may be, they will be beyond criticism, although I think it better to retain the percentage expression only for weight, and to speak of one-quarter bulk or one-half bulk, as it may be.

JAMES TYSON, M.D.

#### "ARTIFICIAL EYES INSERTED WITHIN A WEEK AFTER ENUCLEATION."

To the Editor of THE MEDICAL NEWS,

SIR: I observe a note on the early insertion of artificial eyes by Dr. G. M. Gould. May I be permitted to observe that I have been in the habit of ordering artificial eyes for patients who live at a distance, to be inserted within seven or eight days after the operation. In some instances they have been used sooner. I have followed this plan for several years. I have learned that when they are inserted and worn regularly at so early a date a chronic and annoying conjunctivitis is almost certainly set up. To avoid this, I am particular to insist that the eye shall only be worn when in public for two weeks, that it shall be removed and laid aside for a day or two if any irritation arises, and I prescribe a boric-acid lotion to keep the conjunctival sac sweet.

G. STERLING RYERSON, M.D.

60 COLLEGE STREET, TORONTO, CANADA.

#### NEWS ITEMS.

*Medical Legislation in the United States in 1891.*—Among the laws of interest to the medical profession passed during the year, we may mention the following: The Immigration Law passed by the last Congress requires medical inspection of all immigrants on arrival. All idiots, insane persons, paupers, or persons likely to become public charges, or persons suffering from loathsome, dangerous, or contagious diseases, as well as felons and assisted persons, are to be sent back to the country from which they came.

Congress has also passed an act establishing five stations for the inspection of meat that is destined for export. The principal duty of the inspector appears to be to search for trichinae.

The State of Alabama has passed a law requiring all physicians who are not graduates of reputable medical colleges to obtain certificates of qualification from a board of medical examiners.

The State of Arkansas has passed a law allowing the Board of Medical Examiners, after trial, to revoke the license of a physician to practise, if convicted of unprofessional conduct.

The State of Nebraska has passed a law requiring a certificate from the State Board of Health and graduation from a legally chartered medical school or college, before a license to practise is allowed.

Among the States in which bills regulating the practice of medicine have been defeated, may be mentioned Massachusetts, Rhode Island, and Pennsylvania. The latter State has already a registry law. Massachusetts is now one of five States only in which the practice of medicine is unrestricted by law.

The New York State medical practice law, passed during the preceding year, went into effect. It provides that no one shall practise medicine in the State without previously obtaining a license from the State Board of Medical Examiners.

In Massachusetts a law was passed requiring the detention of inmates of State penal and charitable institutions who are suffering from syphilis in a contagious form until the disease is no longer contagious.

The State of Maine requires all persons having charge of infants with sore eyes to report the fact to physicians. It has also passed a law to provide for the registration of vital statistics.

In Massachusetts an attempt was made to restrict the use of arsenic in the manufacture of various articles, but it resulted merely in prohibiting its use in children's toys and confectionery.

The United States Supreme Court has decided that a court may not order a medical examination of a person in a civil case, against his or her will.

The Municipal Court of Boston has decided that a druggist may sell cigars on Sunday, as a drug to be used for the cure of catarrh.—*Boston Medical and Surgical Journal*.

**The Outcome of a Malpractice Suit.**—The complaint in a suit against Dr. William T. Bull, to recover damages for malpractice, was recently dismissed in a New York court. The suit was originally brought against the New York Hospital for an operation that it was complained was not successfully performed by Dr. Bull. The verdict on this issue was for the hospital. Suit was then brought against Dr. Bull, with the result stated.

**A Journal of Pathology** is about to be published at London. The new journal will be under the editorial charge of Dr. Sims Woodhead, who will be assisted by the principal pathologists of Great Britain and Ireland as collaborators and co-editors.

**List of Medical Journals.**—Dr. Ferdinand King proposes publishing in an early edition of *The Doctors' Weekly* "a complete list of medical, dental, pharmaceutical, veterinary, and scientific journals."

## CORRECTION.

IN THE MEDICAL NEWS of December 12, 1891, p. 688, in the clinical memorandum "Chloroform-poisoning," it should have been said that *apomorphine* was injected hypodermatically to produce emesis—not pilocarpine.

## BOOKS AND PAMPHLETS RECEIVED.

**Therapeutics of Diphtheria.** By Joseph Burghardt, M.D. From a Lecture Delivered at Vienna, April, 1889. Translated by Charles Raetig. Pamphlet. New York: J. H. Vail & Co., 1891.

**Malarial Paralysis.** Clinical Lecture Delivered at the Pennsylvania Hospital. By J. M. Da Costa, M.D., LL.D. Reprint, 1891.

**The Practical Adjustment of Spectacles.** By George M. Gould, M.D. Reprint, 1891.

**Addresses and Essays.** By G. Frank Lydston, M.D. Chicago, Ill.: Fred. Klein & Co., 1891.

**The Surgical Treatment of Pyloric Stenosis.** By N. Senn, M.D., Ph.D. Reprint, 1891.

**Ueber Myositis syphilitica diffusa s. interstitialis.** Von Professor Dr. G. Lewin. Berlin: August Hirschwald, 1891.

**Hypnotism versus Morphinism.** By William Lee Howard, M.D. Reprint, 1891.

**The Atmospheric Tractor and the Uterine Safety-tube.** By P. McCahey, M.D. Pamphlet. Philadelphia, 1891.

**Traumatic Hemorrhage of the Tympanum Causing Deafness, etc.** By S. MacCuen Smith, M.D. Reprint, 1891.

**The Treatment of Urethral Stricture, and a New Divulsor for Rapid Dilatation.** By Otis K. Newell, M.D. Reprint, 1891.

**The Improvement of Evacuators for Litholapaxy.** By Otis K. Newell, M.D. Reprint, 1891.

**The Anatomical and Histological Dissection of the Human Ear in the Normal and Diseased Conditions.** By Adam Politzer, M.D. Translated from the German by George Stone. With 164 Illustrations. London: Baillière, Tindall & Cox, 1892.

**Dysmenorrhea: Its Causes and Treatment.** By J. W. Felty, M.D., of Abilene, Kan. Reprint, 1891.

**A Manual of Practical Obstetrics.** By Edward P. Davis, A.M., M.D. With 140 Illustrations, 2 of which are Colored. Philadelphia: P. Blakiston, Son & Co., 1891.

**Pulmonary Tuberculosis, Etiological and Therapeutical, Based on an Experimental Investigation.** By R. W. Philip, M.A., M.D., F.R.S.E. Edinburgh and London: Young J. Pentland, 1891.

**On Dermatol, a Proposed Substitute for Iodoform; Its Uses in Surgical Practice.** By Charles A. Powers, M.D. Reprint, 1891.

**The Medical News Visiting List, 1892; Thirty Patients per Week.** Philadelphia: Lea Bros. & Co., 1891.

**Some Facts Every Practitioner Ought to Know About Squint.** By Albert Rufus Baker, M.D. Pamphlet. Cleveland, 1891.

**The Electrical Treatment of Fibroid Tumors, with an Analysis of Forty-six Cases.** By G. Betton Massey, M.D. Reprint, 1891.

**Announcement of the Sheppard Asylum, a Hospital for Mental Diseases, Baltimore, Md., 1891.**

**Special Report of the Cause and Prevention of Swine-plague (United States Department of Agriculture, Bureau of Animal Industry). Results of Experiments Conducted under the Direction of Dr. D. E. Salmon, Chief of the Bureau of Animal Industry.** By Theobald Smith, Ph.B., M.D. Washington: Government Printing Office, 1891.

**Human Monstrosities. Vol. I.** By Barton Cooke Hirst, M.D., and George A. Piersol, M.D. With 7 Photographic Reproductions and 18 Wood-cuts. Philadelphia: Lea Bros. & Co., 1891.

**A Vegetable Plate; also, A New Technique in Intestinal Anastomosis.** By Robert H. M. Dawbarn, M.D.

**West Virginia Resolutions.** By Webb J. Kelley, M.D. Reprint, 1891.

**Medical Department, University of Wooster, Cleveland, Ohio; Announcement for 1892.** Pamphlet.

**Report of the Surgeon-General of the Army to the Secretary of War, for the Fiscal Year Ending June 30, 1891.** Washington: Government Printing Office, 1891.

**The Medical Profession, and Who Should Enter It.** By Charles H. Merz, A.M., M.D. Reprint, 1891.

**A System of Practical Therapeutics.** Edited by Hobart Amory Hare, M.D., Assisted by Walter Chrystie, M.D. With Illustrations. Philadelphia: Lea Bros. & Co., 1891.